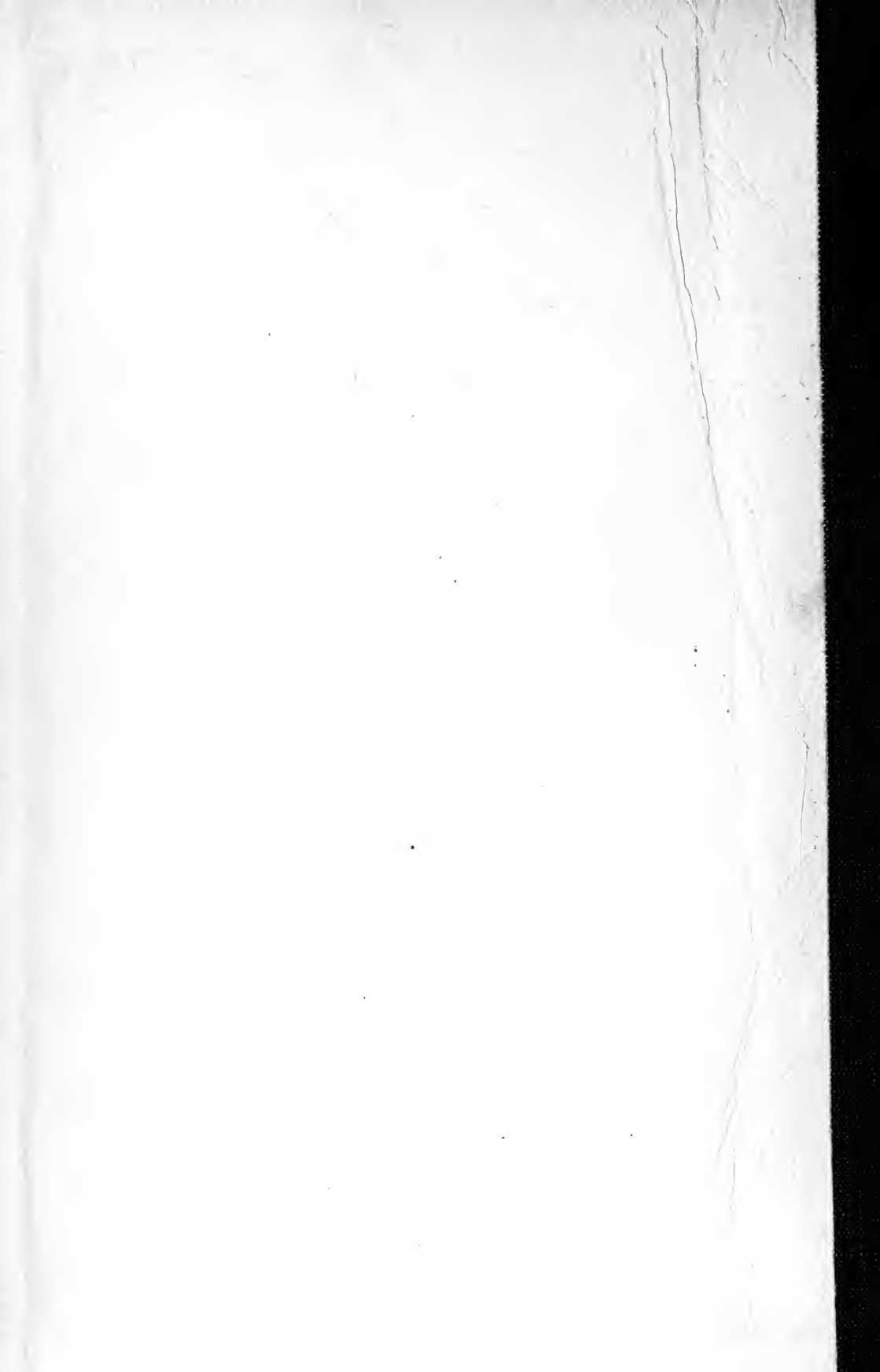


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JANUARY, 1918

No. I

A STUDY OF FIFTY FEEBLE-MINDED PROSTITUTES

MARY E. PADDON

Director of Field Work, New York Magdalen Home

In approaching the problem of prostitution and mental deficiency, there is nothing to add to the numerous attempts already made to estimate the number of prostitutes who are feeble-minded. A table was given in the June, 1915, issue of "Social Hygiene" in which the percentage of feeble-minded women among groups of prostitutes examined varied from 29 to 97 per cent. Unless a census could be made of all prostitutes, clandestine and professional, and all of these women put through mental tests, it seems impossible to judge correctly as to percentages. The groups tested were women who had been arrested. Is it not reasonable to believe that the more mentally alert among these women will stand the least chance of detection and arrest? The very lack of initiative and judgment which may be partly if not largely responsible for the occupation of the woman would bring her into the hands of the law, and ultimately into a court or an institution where she could be investigated and tabulated. The proportion for several institutions is given in Table I.

TABLE I. THE PROPORTION OF FEEBLE-MINDED AMONG PROSTITUTES EXAMINED AT SEVERAL INSTITUTIONS.

TOTAL 1825 CASES.

REPORTED BY	No. EXAMINED.	% F. M.
State Board of Charities and Corrections, Va.	120	83.3
Chicago Morals Court	639	62.0
Chicago Morals Court (second group)	126	85.5
Illinois Training School for Girls	104	97.0
Massachusetts Vice Commission	300	51.0
Massachusetts State Woman's Reformatory	243	49.0
New York State Reformatory for Women	193	29.8
Bureau of Social Hygiene	100	29.0

The feeble-minded have been divided into three groups: the moron, the imbecile and the idiot. We shall only have to deal with two of these classes in considering the relation between the problems of feeble-mindedness and prostitution; i. e. the moron and the imbecile. The

idiot is so pronounced a type, so obviously inferior, both mentally and physically, that she would almost never be recruited to the ranks of prostitution.

In studying the cases of 50 girls, and women, all of them either self-confessed or court-convicted prostitutes, only those cases have been considered in which the personal and family history has been sufficiently well known to be of real assistance in diagnosis. The Binet Scale has been used as a starting point. The mental ages in relation to the actual ages are shown in Table II.

TABLE II. DISTRIBUTION OF AGES AND MENTAL AGES OF FIFTY PROSTITUTES.

Actual Age.	No. of Cases.	Mental Age.					
		V	VI	VII	VIII	IX	X
17	4	---	---	2	---	2	---
18	6	---	---	1	1	4	---
19	5	---	---	---	2	1	2
20	6	---	---	1	1	4	---
21	5	1	---	---	3	1	---
22	4	---	---	---	2	2	---
23	3	---	---	2	---	---	1
24	2	---	---	---	1	1	---
25	4	---	---	1	1	2	---
26	3	---	---	---	1	2	---
28	1	---	---	1	---	---	---
29	3	---	---	1	1	1	---
30	2	1	---	---	---	---	1
31	1	---	---	---	1	---	---
32	1	---	---	1	---	---	---
TOTALS	50	2	0	10	14	20	4

It is important to remember that such psychological tests as the Binet-Simon tests, valuable as they are in estimating the level of intelligence, do not furnish us with complete information for establishing the diagnosis of feeble-mindedness. Conditions not due to an original defect in intelligence may give results similar when such tests are applied. Examples are the various acquired diseases of the brain which cause mental reduction. On the other hand, a girl's social adaptability does not always depend chiefly upon her intelligence. There are other factors in the life of an individual which often have far more to do with conduct in general, and sexual delinquency in particular, than has intelligence. For instance, the degree of emotional stability is an exceedingly important matter. Conduct may be quite as profoundly

influenced by certain types of emotional responsiveness as it is by certain types of defective intelligence. Of course, in the lower ranges of mental deficiency, the tremendous weight of the defect itself overshadows all other factors; but, in the higher ranges and in persons without intellectual defect, these other factors must be taken very seriously into account. The output of energy, too, is by no means directly proportional to the amount of intellectual defect. Such considerations make it seem clear that we should utilize psychological tests for determining, within relatively broad lines, the rate of intellectual growth and the level of intelligence attained; but that, in interpreting them, we should bear in mind, first, accidental factors which may invalidate their accuracy; and, second, other factors of a different nature altogether which go far toward determining the efficiency of life and especially the social reactions of individuals.

Each of these 50 cases has been investigated from a social viewpoint, with the object of discovering: 1. Possible causes in personal or family history which would be responsible for mental retardation; 2. Early evidence in the history which show at what age the girl proved herself different from other children; this includes the school record which also shows how far these types prove teachable under ordinary conditions; 3. Her ability or inability to adapt herself to economic conditions and to hold a position.

Upon investigation, 31 families show a decided downward trend, which would be the logical consequence of low mentality; 7 were decent and enterprising, while the remaining 12 were at a dead level, showing neither marked deterioration nor progress. The sizes of the families varied considerably, the smallest being that in which the subject was the only child, the largest being that in which there were 16 children, 7 living, 9 dead. The average was 6.1 children in a family 4.6 living, and 1.4 dead. One family had 15 children, 1 living and 14 dead. In 18 families there were found to be one or more cases of tuberculosis. In 11 families, immorality is known of one or both parents. In 10 families there is a criminal record for one parent. In 7 families there were known to be one or more cases of insanity; in 2 families, cases of epilepsy. In 11 cases tuberculosis has been the cause of the death of one parent; in 1 case, syphilis has been the cause of death; in 3 cases, insanity; in 3 cases, alcoholism. In 7 cases one or both parents are hard drinkers. In 4 cases, one parent is known to have received treatment for syphilis.

TABLE III. SCHOOL LEAVING AND SCHOOL ATTAINMENTS,
BY MENTAL AGES.

MENTAL AGE. AGE LEFT. GRADE REACHED.

5.....	?.....	?
5.....	12.....	2A
7.....	14.....	7B
7 (3).....	never went	
7.....	10.....	2
7.....	16.....	5A
7.....	15.....	ung
7.....	14.....	5A
7.....	10.....	2A
7.....	14.....	4B
8 (4).....	never went	
8.....	13.....	2A
8.....	16.....	4A
8.....	16.....	4A
8.....	11.....	3A
8.....	12.....	4B
8.....	9.....	2B
8.....	12.....	4B
8.....	15.....	5B
8.....	18.....	6B
9.....	16.....	5A
9.....	14.....	5A
9.....	14.....	4B
9.....	15.....	ung.
9.....	15.....	6A
9.....	15.....	4B
9.....	13.....	ung.
9.....	12.....	6B
9.....	15.....	5A
9.....	11.....	2B
9.....	15.....	7A
9.....	16.....	5A
9.....	15.....	7B
9.....	14.....	6A
9.....	16.....	5B
9.....	14.....	7A
9.....	9.....	3B
9.....	15.....	6A
9.....	12.....	ung.
10.....	15.....	6A
10.....	12.....	4A
10.....	16.....	7A
10.....	14.....	4A

A large number of these girls, it was learned upon interviewing the mother or an elderly female relative, had been backward in cutting teeth, and in learning to walk and talk; had begun to be at an early age, the mother often put it, "different from other children". In numerous cases the mother gave a history of bad reports from the school teacher, and of the girl having been often "kept back" in school, another evidence of her inability to keep up mentally with other children of her own actual age.

In considering the school records of these girls, it must be taken into consideration that some of them had their schooling in Europe, while the majority who went to public schools in and about New York, if they were not sufficiently retarded to be put into special classes were quite possibly moved into higher grades on account of their age and size, and because of the eagerness of their parents that they should acquire working papers when they really were not fit to do the work required of them. Let us look (Table III) at the ages of these girls when they left school, and the grades which they attained.

Whenever the school record was obtained by a personal visit the report given to the field-worker was most often of the girl's inability to keep up with other children of the same age, and of her failure to respond to moral or ethical guidance. In four of these cases there was a known history of truancy, and eroticism, dating from an early age. The records of the girls of the stable type showed them eager to please but quite incapable of making reasonable progress or of comprehending moral distinctions.

The work records of these girls are often difficult to obtain. Usually we have only the girl's own statement as to where she has worked, and what wages she has received. Also in some cases her statement is the only information available as to why she left the position. In interviewing the girls, and asking them about their work, some cannot remember, or will not tell the addresses of their past employers. They declare that they have worked in so many different places that they cannot enumerate them. When it was possible to get a definite address from the girl, and to locate the place of employment, the report was almost invariably that she had been inattentive, lazy, irregular, incompetent; in some places she had been classed as somewhat wrong mentally or "simple" by her fellow workers. These, however, were the girls who came within the seven or eight-year-old class mentally. The girls were quite ingenuous in stating that they had rarely kept a job

more than a few weeks or months; that they were discharged for being late, lazy or inattentive. Some say that they "just left", that they got tired of working or had no interest in advancing themselves. Of the fifty girls whose cases are under consideration, only 4 have held any position for over a year; these 4 were of the stable type.

The wages of these women, according to their statements, varied from \$1.50 to \$25 a week. The average wage was about \$5. The \$25 a week was claimed by a girl who had worked as a chorus girl in a musical comedy. It is not necessarily impossible that she could have earned this sum, as one of the characteristics of feeble-minded children is that they learn with comparative ease folk dances or rhythmic drills performed to music. Tredgold mentions the fact that idiots who cannot feed themselves or articulate a single word can often hum correctly a tune which they have heard. This particular girl was extremely pretty, had an ear for music, and some skill in dancing, so that \$25 a week was not an impossible salary for her to earn in a successful show. Unfortunately, her mentality, that of a ten-year-old child, made the odds against her in such a life of temptation especially great, so after her first illegitimate child was born, and before she was eighteen years old, she found prostitution the easiest way of earning her living.

TABLE IV. AGES AT WHICH FIRST SEX OFFENSES WERE COMMITTED.

Age.	No. Cases.	Age.	No. Cases.
12.....	1	17.....	9
13.....	2	18.....	7
14.....	5	19.....	4
15.....	7	20.....	4
16.....	11	Total.....	50 cases.

Although a high percentage of prostitutes are claimed to be feeble-minded, I have never heard it claimed that all feeble-minded women become prostitutes, so let us assume that up to the age of fifteen years, at least, the lives of these fifty girls did not vary greatly from the lives of other feeble-minded girls of the same degree of intelligence; let us see how far their mental deficiency was responsible for the choice of life, if choice it can be called. According to their own statements, the age at which they committed their first sex offense was as shown in Table IV.

These statements are, in all probability, not absolutely accurate because most of these girls are untruthful, and even a woman with a childish mentality seems to have an instinct which makes her attempt to place herself morally in the best light possible with a superior. It is probable that in many cases the girls were younger than they admit, but even if the age is only approximate it shows that the largest number made their first mis-step between 15 and 17 years of age, a period when even the mentally normal girl is experiencing the instability of adolescence.

TABLE V. AGES AT WHICH LIFE OF PROSTITUTION WAS ENTERED.

Age.	No. Cases.	Age.	No. Cases.
15.....	2	19.....	6
16.....	12	20.....	6
17.....	9	Over 20.....	6
18.....	9	Total.....	50 cases.

According to their own statements the ages at which they entered the life of prostitution are as shown in Table V. This table must be considered with the same reservation as the previous one. We find that about a year elapsed according to these tables from the time the girl first became immoral until she turned her immorality to commercial value. It is interesting to note the reasons these women gave for entering such a life; 13 said that they did it because the men who had ruined them or who were their sweethearts told them to do so. In 3 cases the man was the lawful husband. Apparently, they did not question the right of these men to command them or else their wills were too weak to resist the command. One was placed in the life by her mother; the other, by her step-father, of whom she lived in great fear. Ten said that they prostituted themselves because they liked the good food, drink and pretty clothes which they could not get in any other way. How indicative of lack of judgment and a sense of values! One girl said she was "ruined anyway, so what was the difference". None of these girls was ignorant of the existence and danger of venereal disease, none was ignorant of the danger of pregnancy, few doubted the parental displeasure and the disgrace which would attend detection, and yet food and drink and clothes were sufficient to offset all these consequences. The other reasons were somewhat similar. Nine girls said that it was the easiest way of making money and more fun than working; eight said that they liked

the life and the physical experience; eight said in a disinterested way that they really did not know what had made them enter a life of prostitution but seemed to think that the only wrong or unfortunate thing that they had done was to be caught.

The women who run disorderly houses and the men who are supported by the immorality of women are shrewd enough to recognize the weakness and lack of judgment of these women and play upon them accordingly. The "madames", as a rule, pet and flatter them, profess great solicitude for their welfare and happiness, say that they hate to see a pretty, attractive girl slaving her life away at a poor job, never having any pretty clothes or good times, and are glad to release her from such a fate. The madame teaches the girl to look upon her as a benefactress, and in the fact that she, even unconsciously, recognizes the girl's mentality as younger than her body, lies her power. The feeble-minded girl responds to this treatment more readily than to that accorded her by her parents or employer who perhaps gave her credit for a mentality equal to her actual years, and treated her accordingly. The man uses much the same methods in dealing with his girl as the madame, varying it by bullying and beating if she does not obey him implicitly. The girl accepts the beatings and gives about as much thought to them and to her vocation as the organ grinder's monkey who is sent out at the end of a string to collect pennies which he brings back on call and turns over to his master.

Of the 50 women we are studying, 19 have been inmates of orphan asylums or other institutions for dependents; 17 have never before been in any institution for delinquent or wayward girls; 14 have been in some such institution or in the work-house once previous to their present commitment; 12 have been twice; 3, three times; 2 have had four, 1 five, and 1 nine previous commitments. The one who has had 9 commitments to the work-house had also been at Bedford Reformatory and at Randall's Island. She was released from Randall's Island and went back on the street, until she was finally sent to the Magdalen Home by a judge who felt she was a subject for careful study. It was found that she was afflicted with syphilitic paresis as well as being mentally deficient, and she was sent to an insane asylum. One of these 50 women had been an inmate of a hospital for the insane, while 6 had been in institutions for the feeble-minded previous to their commitment to the Magdalen Home; but had been released and returned almost at once to lives of prostitution.

The records of these feeble-minded prostitutes make one wonder if a mentally normal prostitute would prove herself true to her superior power to profit by experience, and become more careful and wary after one or two arrests than would a mentally defective girl.

Nine of these women have gonorrhea; 14 have syphilis; 11 have both, while only 16 are free from venereal disease. This taint in their blood added to their inferior mentality argues ill for the 37 illegitimate children who have been born to them in the following numbers:

- 15 girls have had 1 illegitimate child
- 8 girls have had 2 illegitimate children
- 2 girls have had 3 illegitimate children
- 8 acknowledge miscarriages

Fortunately, twelve of these children have died; three of those who survived show evidence at an early age of their degenerate heredity.

One of the most interesting experiences in studying these 50 cases has been in watching the daily life of the girls, and noting their reactions to surroundings while they have been confined in the Magdalen Home, where the daily life resembles that of a large somewhat strict boarding school. The two subjects testing five-years are almost animal-like in their tendencies. One of them is the case already mentioned who suffered from syphilitic paresis as well as feeble-mindedness, and was transferred to an insane asylum. The other was generally amiable, but subject to fits of unreasoning rage, in which she would tear out handfuls of hair and beat her head in a frantic manner. The ten who test 7 years by the Binet scale divide into two classes. Four of them are unstable, quarrelsome, and fail to respond to discipline; two of these fly into passions of uncontrollable temper with little or no provocation, and some are unable to adjust themselves to their surroundings. The other six of the stable type are, while under supervision, docile, and quiet like good little children who are eager to please; three of them have illegitimate children as tokens of their docility. Six of the 14 who test 8 years by the Binet scale come into this same stupid docile class; five are shrewd and tricky, while four, also in the unstable class are of the quarrelsome type. Eight of the 20 who test 9 years are unstable, vicious, profane, and quarrelsome. Nine are erotic, emotional, and in the habit of uttering elaborate fabrications. Eleven of these 20 have had one or more illegitimate children. The girls of nine-year mentality in this group show

the most pronounced eroticism among both the stable and the unstable types; it would be interesting to know whether this characteristic would show itself predominant among women with nine-year mentality should a much larger group be examined. Of the four who test 10 years, three are obedient and easily influenced, but untruthful and untrustworthy when not watched. One of them is unstable and troublesome, having a craving for excitement, which, when unsatisfied, finds an outlet through a violent temper.

These characteristics and the reaction to surroundings seem to show how easily these girls fall and fit into the lives of prostitution that they follow. The stable, docile type are easily exploited, and do not question the superior mind that governs them, any more than children question the authority of a school teacher; the unstable find in the excitement, the freedom from irksome duties and the appeal to pleasure-loving and uncontrolled senses, an atmosphere which they enjoy without question.

Twenty-eight, or more than half of these women have shown themselves so amenable to good influences while in confinement, that it makes one realize how different their lives might have been and what a different part they might have played in society, had their deficiency been recognized at an early age, and the girls confined in a colony where they could have performed some simple tasks which would have paid at least part of their keep instead of putting the public to the expense of arresting them one or more times, trying and committing them and after having cared for them in hospitals during their confinements, caring for their illegitimate children, who are more than apt to repeat their mothers' records.

Twenty-four of these women have been diagnosed while in the custody of the Magdalen Home, and transferred to custodial institutions for the feeble-minded; the balance of the number are either waiting for clinical examination and transfer, or have been paroled to the custody of some responsible person because of the difficulty in getting cases admitted to the already overcrowded state and city institutions.

In conclusion, it seems reasonable to say that the feeble-minded girl has many characteristics which make her a likely recruit to the ranks of prostitution, and that as a prostitute, her low mentality makes her, if possible, a greater menace to society than her more intelligent sister, because her low intelligence makes her less careful in caring

for herself physically, and because this same stupidity makes her become the mother of illegitimate children approximately three times as often as the mentally normal prostitute. But in spite of all this, because of her low mentality, her responsibility is so much less that she should be protected against herself and against unscrupulous people, rather than punished or blamed.

A FURTHER COMPARISON OF SCATTERING AND OF THE MENTAL RATING BY THE 1908 AND 1911

BINET-SIMON SCALES.

J. E. WALLACE WALLIN

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We have already¹ analyzed our data on scattering in the 1908 (writer's guide) and 1911 (Vineland) B.-S. (Binet-Simon) scales when the subjects were classified according to the intelligence diagnosis. The analysis was based on a block of 840 consecutive subjects who had been fairly thoroughly tested by the B.-S. scale. The scattering, gauged by the number of tests passed above the basal age, proved to be very considerable for all grades and types of subjects, varying from a minimum of three-fourths of a year to a maximum of a year and a half. It was invariably greater in the 1911 than in the 1908 scale in all the classifications, the minimum difference between the two scales in any classification being .06 of a year (among the deferred cases) and the maximum difference being .80 of a year (among the normal cases). In four of the seven intelligence categories the difference amounted to over one-third of a year. The difference was negligible in only two categories. Although the results for the 1908 and 1911 arrangements of the tests were somewhat discrepant, there was no evidence that the scattering was greater among the feeble-minded or potentially feeble-minded than among the normal children. Apparently the scattering is somewhat greater among the insane and epileptic than among the feeble-minded or normal, but this tentative conclusion requires verification. In general, the scattering varied

1. For the details consult "The Phenomenon of Scattering in the Binet-Simon Scale Along Feeble-Minded and Normal Children", Psychological Clinic, November, 1917. We have gathered data from the following lines of investigation on all our subjects before attempting to make a diagnosis: pedagogical record, personal and family history, physical examination (all the above with the cooperation of principals, teachers and physicians) and psychological examination. All the mental examinations have been made by the writer himself. We have never attempted to diagnose any one whom we have not personally examined.

with the extent of the testing, so that the greater the number of advance tests given the higher was the intelligence age secured by the subjects, the more extensively tested pupils earning three-fourths of a year more of credits than the less extensively tested in most of the B.-S. ages.²

In our previous communications we did not attempt an analysis of the phenomenon of scattering when the subjects were grouped according to B.-S. age. We have done that for both the 1908 and 1911 scales in the present article.

When the data are classified according to B.-S. age we again find more scattering in the 1911 than in the 1908 scale, as determined by the number of credits earned above the basal age. Table I shows that the average number of tests passed above the basal age is 5.1 for the

TABLE I. ADVANCE POINTS EARNED IN 1908 AND 1911 SCALE.

B.-S Age*	Boys.				Girls.				Both Sexes.			
	No.	1908		No.	1908		No.	1908		1911		1908 Y'rs.
		P'nts.	P'nts.		P'nts.	P'nts.		P'nts.	P'nts.	P'nts.	Y'rs.	
		Av.	Av.		Av.	Av.		Av.	Av.	Av.	Av.	
II				2	2.5	2.5	2	2.5	2.5	.5	.5	
III	10	3.5	5.9	7	2.4	4.8	17	3.0	5.4	.6	1.0	
IV	21	3.1	5.7	11	3.3	6.2	32	3.2	5.9	.6	1.1	
V	21	4.8	7.9	16	5.6	5.8	36	5.1	7.2	1.0	1.4	
VI	45	7.2	8.3	25	7.9	8.1	70	7.5	8.2	1.5	1.6	
VII	100	6.5	6.3	41	8.2	6.1	141	7.0	6.2	1.4	1.2	
VIII	152	5.3	5.8	68	6.9	6.1	220	5.9	5.9	1.1	1.1	
IX	84	5.7	8.7	26	5.5	6.2	110	5.7	8.1	1.1	1.6	
X	111	2.4	8.1	37	2.0	7.7	148	2.3	8.0	.4	1.6	
XI	50	3.7	11.0	3	3.0	10.6	53	3.7	10.9	.7	2.1	
XII	7	1.	1.				7	1.	1.	.2	.2	
XIII	4		.7				4		.7		.1	
Total	604			236			840					
Ave.		4.8	7.3		5.8	6.5		5.1	7.1	1.0	1.4	

No., number of subjects, the same in all tables. Av., average. To convert the points into decimals of a year, multiply by .2.

*The 1908 rating determined the B.-S. age in which the subjects have been classified in all tables. The II-Year tests used are those given in *Experimental Studies of Mental Defectives*, p. 119f.

- These results are set forth in detail, together with the practical consequences involved, in "Wide Range Versus Narrow Range Binet-Simon Testing", *Journal of Delinquency*, 1917, 315 f. The article gives the results for 341 subjects sketchily tested and 840 more extensively tested.

1908 scale as against 7.1 for the 1911 scale. In other words, one year of advance credit was earned on the average in the 1908 scale and 1.4 in the 1911 scale. The smallest average amount of advance credit earned in the 1908 scale (exclusive of the highest age) was in Age XII, .2 of a year, and the greatest average amount in Ages VI and VII, 1.5 and 1.4 of a year, respectively, while in the 1911 scale the smallest average amount was in Age XIII, (i. e. among those who graded XIII) .1 of a year, and the greatest amount in Age XI, 2.1 years, followed by Ages VI, IX and X, where it amounts to about 1.6 years. We have already especially emphasized that the credits won from the advance testing cannot be regarded as insignificant.³ Of course, in comparing the two scales it must be remembered that in the 1908 scale the number of tests in each age is unequal while in the 1911 scale it is the same. The large number of advance credits won in Ages VI and VII in the 1908 scale may be due to the abundance of tests in Ages VI to VIII. In spite of this fact, however, more advance credits were earned in the 1911 than in the 1908 scale. The number of advance points earned was greater in the 1911 than in the 1908 scale in 7 of the 10 B.-S. ages that can be compared, and greater in the 1908 than in the 1911 in only one age, namely VI, while the amount of credit is equal in the two scales in two ages, namely VIII and XII. The latter age, however, can be disregarded because it contains only a few subjects. In Age XI the scattering is three times as great, and in Age X about four times as great in the 1911 as in the 1908 scale. That the scattering for the X-year olds in the 1908 scale was so small, amounting to only 2.3 tests, is undoubtedly due to the disproportionate ease of the tests in this age which allowed many to pass the standard who otherwise would have made it only by advance credits, a fact to which we called attention six years ago.⁴

A second method of comparing the extent of the scattering in the two scales is to determine the average range of B.-S. ages in which tests were passed. This is done in Table II. The "range" extends from and including the basal age to and including the highest age in which at least one test was passed, irrespective of whether or not all the tests were missed on any age level, between these extremes (such

3. Psychological Clinic, November, 1917.

4. Experimental Studies of Mental Defectives, 1912, 41.

instances have occurred.⁵⁾ Since the basal age is included in the averages it is evident that the number of ages above the basal age in which tests were passed can be secured by deducting one from the figures in the table.

TABLE II. RANGE OF B.-S. AGES IN WHICH TESTS WERE PASSED.

B.-S. Age.	Boys		Girls		Both Sexes	
	1908	1911	1908	1911	1908	1911
III	2.9	3.4	2.4	3.0	2.7	3.2
IV	3.3	4.0	3.3	4.0	3.3	4.0
V	3.4	4.3	3.8	3.6	3.6	4.0
VI	3.8	4.2	4.3	4.1	4.0	4.1
VII	3.7	3.7	3.9	3.5	3.7	3.7
VIII	3.5	3.9	3.9	3.8	3.6	3.9
IX	3.7	4.1	3.6	3.8	3.7	4.1
X	2.7	4.7	2.3	4.0	2.6	4.5
XI	3.1	6.2	2.6	5.3	3.0	6.1
XII	1.4	5.7			1.4	5.7
XIII	1.	6.2			1.	6.2
Av.	3.3	4.3	3.5	3.8	3.4	4.1

The ages extend from and including the basal age to and including the highest age in which at least one test was passed.

The range is greater in the 1911 scale than in the 1908 in all the ages except one, VII, where the ranges are equal, the difference between the averages for all the subjects in all the ages being .7 of a B.-S. age. The difference is most marked from age X to XIII. In the 1908 series the range is greater in Age XI than in Age X, again suggesting that many subjects made Age X because of the relative ease of this age standard. The average number of years in which advance tests were passed in the 1908 scale is 2.4, varying from no years in Age XIII to 3 years in Age VI, while the average in the 1911 scale is 3.1 years, varying from 2.1 in Age III to 5.2 in Age XIII.

Based on the general averages, Table I, the scattering is slightly greater for the girls than for the boys in the 1908 scale, but the reverse is true in the 1911 scale. Again, the range of ages in which tests are passed, Table II, is slightly greater for the girls than for the boys in the 1908 scale, while it is slightly greater for the boys than for the girls in the 1911 scale. It has usually been assumed that boys vary

5. The basal age used is always the highest B.-S. age passed, irrespective of whether or not lower age standards were missed.

more than girls in mental and physical traits. It is seen that our results from the Binet-Simon testing vary with the scale used. The data which we have previously⁶ analyzed from a number of psychological tests which we have given to normal and abnormal males and females are quite discrepant. In some tests the males have varied more than the females while in other tests the opposite has been the case. In our intelligence surveys, however, we have uniformly found a preponderance of males among the mental defectives.⁷

Our analyses have thus shown that there is more scattering in the 1911 than in the 1908 scale whether the subjects are classified according to the intelligence diagnosis or according to B.-S. age. The 1911 scattering is greater than the 1908 scattering in every intelligence group and in the great majority of B.-S. ages.

COMPARATIVE RATING.

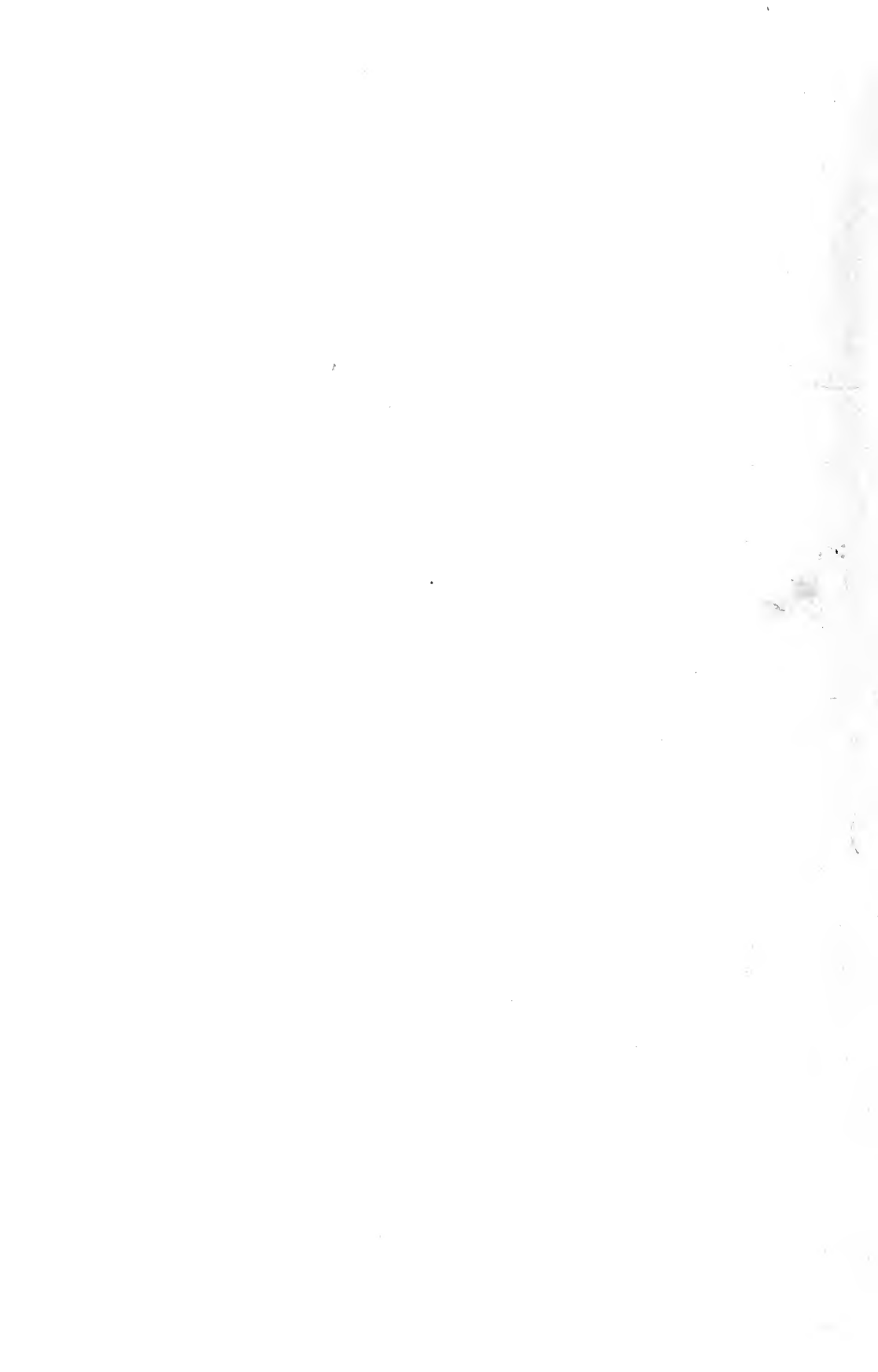
The intelligence rating secured was the same by the two scales with 109 subjects (89 boys and 20 girls), which is 12.9% of the whole group, while it was higher by the 1908 than by the 1911 scale with 711 subjects (500 boys and 211 girls), or 84.6%, and lower by the 1908 scale with only 20 subjects (15 boys and 5 girls) or 2.3%. As seen in Table III, 23.4% of the examinees graded one point (.2 year) higher, 20.5% two points higher, 17.1% three points higher, 12.2% four points higher, 5.4% five points higher, and 5.3% from six to twelve points (1.2 to 2.4 years) higher by the 1908 than by the 1911 scale. 10.8% graded a year or more higher, while 43.9% graded less than half a year higher by the 1908 than by the 1911 scale. Only one graded as much as .8 a year and two .4 of a year higher by the 1911 than by the 1908 scale. With the other 18 cases the 1908 excess amounted to only one point, or .2 of a year.

Table IV gives the average B.-S. age rating by both the 1908 and 1911 scales for each B.-S. age for the boys and girls separately and combined, and also for all the subjects irrespective of the age rating. The average difference between the 1908 and 1911 rating was secured by subtracting the 1911 average B.-S. age rating in a given B.-S. age or the average rating for the subjects in all B.-S. ages from the corre-

6. Psycho-Motor Norms for Practical Diagnosis. Psychological Monographs, No. 94, 1916, pp. 59-68, 70-71, 100-102.

7. As above, p. 70. Also Report of the Psycho-Educational Clinic and Special Schools, in Report of the Board of Education of the City of St. Louis, 1914-1915, p. 142, and 1915-1916, p. 162.





sponding 1908 average B.-S. ratings. The average B.-S. age of all the subjects by the 1908 scale is 8.4 and by the 1911 scale 7.9. On the average, therefore, the rating is half a year lower by the 1911 than by the 1908 scale. The difference is exactly the same for both the boys and the girls. The girls, however, grade .8 of a B.-S. year lower than the boys, although in chronological age the girls were only .2 of a year younger.⁸ The average 1908 rating is higher than the 1911 rating in every B.-S. age. The biggest difference is in the higher ages, from X to XIII, and the smallest difference in the lowest ages, from III to V, and in the middle ages, from VII to IX. The difference exceeds half a year in three ages, X, XII and XIII. With one exception, the difference is the largest in Age X, an age found in all our investigations to be disproportionately easy in the 1908 scale. Thus among our epileptics 94% of those who classified in X passed the X-th year standard (i. e., had a basal age of X years), while only 10% of those who classified in IX passed the IX-th year standard, only 29% of those who graded VIII passed the VIII-th year standard, only 13% of those who graded VII passed Age VII, none of those who graded VI passed Age VI, and only 41% of those who graded XI passed the XI-th year standard. The figures for the other ages may be found in Table III in *Experimental Studies of Mental Defectives*, p. 29. Age X was the easiest, and Age VI the hardest of all the B.-S. age standards among our epileptics. Of course, we are disregarding Age II, which does not belong to the 1908 series, Age XIII, in which we scored plus on two passes and which, because it was the highest age in the scale, could not be made on advance credits, and Age XII. Those who grade XII had only three tests above XII from which to earn advance credits. In calling attention to the amazing disparity in the relative collective difficulty of the different B.-S. age standards the critics contended that our results were based on epileptics and therefore were not apropos. Table V shows, however, that the conclusions which we previously had reached in work with epileptics are abundantly confirmed from the results of our present group of 840 non-epileptics.⁹ The age standards

8. *The Phenomenon of Scattering in the Binet-Simon Scale Among Feeble-Minded and Normal Children*, Psychological Clinic, 1917, November. We have invariably used the exact chronological age, namely in years and months, expressed, however, in the form of a decimal.

9. Diagnosed in the article in the Psychological Clinic, 1917, November.

which were least frequently passed in the 1908 scale are in both groups VI and IX, followed by VII, while the age standard which was most easily passed in both groups is X, followed by III and IV. These analyses, then, uniformly show that these are the hardest and easiest standards, respectively, in the 1908 scale. Among the hardest standards we would also add the two highest ages, although this is not shown by the foregoing method of analysis, for the reasons already given.

When we turn to the 1911 scale, we find that the age in which the smallest percentage passed the age-standard in which they grade is XII, followed closely by IX, and less closely by XI, X and V—these apparently, therefore, are the hardest standards—while the ages which were passed by the largest number were VII and IV, followed by VIII, which accordingly appear to be the easiest standards. The fact that IX is disproportionately hard in both scales might account for the small difference found between the scales in that age Table IV, the fact that IV, VII and VIII are relatively easy in the 1911 scale might also account for the small difference found between the two scales in those ages, while the fact that the upper ages in the 1911 scale were passed very infrequently or not at all by the subjects who classified in them would seem to explain why the largest differences between the ratings by the two scales were in those ages. Be that as it may, we have long felt that the Vineland 1911 scale made the upper ages, which were already too hard (with the exception of X) still more difficult. Of this more anon.

The most striking difference, however, between the 1908 and 1911 figures in Table V is in the number who passed the age-standards of the ages in which they classified. In the 1911 scale very few passed their age standards in most of the ages. The highest percentage in any age was 43.2%, in VIII. The per cent who passed their age-standards in the 1908 scale is very considerably larger except in VI and VII (the per cents are almost the same in the latter). The fact that so few passed the age standards in the 1911 scale is due, we assume, to the more rigid passing standard followed in this scale. In the 1911 scale the standard is failed if only one test is missed, thus lowering the base one year. We had already concluded that the lower rating obtained in the 1911 scale was partly due to the lower basal age obtained in the 1911 scale.¹⁰ We are also forced to the same conclusion by the

10. Psychological Clinic, 1917, November.

TABLE IV. THE AVERAGE RATINGS BY THE 1908 AND 1911 B.-S SCALE, AND AVERAGE AMOUNT IN DECIMALS OF A YEAR BY WHICH THE 1908 AGE RATING IS HIGHER THAN THE 1911 AGE RATING.

B.-S. Age.	1908 Rating			1911 Rating			Difference		
	Boys Av.	Girls Av.	Both Av.	Boys Av.	Girls Av.	Both Av.	Boys	Girls	Both
II		2.5	2.5		2.5	2.5			
III	3.5	3.3	3.4	3.1	3.1	3.1	.4	.2	.3
IV	4.5	4.3	4.4	4.0	3.9	4.0	.5	.4	.4
V	5.6	5.3	5.4	5.2	5.1	5.2	.4	.2	.2
VI	6.4	6.4	6.4	5.9	6.4	5.9	.5	.0	.5
VII	7.4	7.5	7.4	7.0	6.8	7.0	.4	.7	.4
VIII	8.4	8.4	8.4	8.1	7.8	8.0	.3	.6	.4
IX	9.4	9.2	9.4	9.2	8.8	9.1	.2	.4	.3
X	10.3	10.3	10.3	9.6	9.5	9.6	.7	.8	.7
XI	11.2	11.2	11.2	10.6	10.8	10.6	.6	.4	.6
XII	12.2		12.2	11.6		11.6	.6		.6
XIII	13.0		13.0	11.7		11.7	1.3		1.3
Av.	8.6	7.8	8.4	8.1	7.3	7.9	.5	.5	.5

data presented in Table VI. The basal age is lower in the 1911 than in the 1908 scale for 55.1% of the subjects, while it is lower in the 1908 than in the 1911 in only 2.5% of the subjects. In the remaining 42.3% of the cases the basal ages are the same in both scales. It is possible that the chief reason why the 1911 base is so frequently lower than the 1908 is the more rigid passing standard—to which we have just referred—which lowers the 1911 base one year below the 1908 when only one test is missed in any age. But another reason why the 1911 rating is lower, at least in parts of the scale, is the fact that there are also less tests in some of the 1911 ages than in the 1908 from which to earn advance credits (on the other hand, in some ages there are less tests in the 1908 scale). We are not attempting to determine in this article to what extent the shifting of the tests themselves in the 1911 version is responsible for the difference in the rating between the two scales.

TABLE V. PERCENTAGE OF SUBJECTS WHO SUCCESSFULLY PASSED THE AGE-STANDARD IN WHICH THEY WERE CLASSIFIED.

B.-S. Ages.	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
1908 Scale	100	88.2	84.3	44.4	2.8	40.4	43.6	22.7	92.5	45.3	100	100
1911 Scale	100	11.1	43.3	9.6	18.0	43.2	32.7	2.0	9.4	7.7	0	.....

Note: The II.-year tests are those given in Experimental Studies of Mental Defectives, 1912, p. 120.

TABLE VI. PERCENTAGE OF SUBJECTS WHOSE 1911 BASAL AGE IS LOWER THAN THE 1908 BASAL AGE, WHOSE 1908 BASAL AGE IS LOWER THAN THE 1911 BASAL AGE, AND WHOSE 1911 AND 1908 BASAL AGES ARE THE SAME.

B.-S.	1911 Base Lower			1908 Base Lower			Both			1911 and 1908 Bases Equal		
	No.	%	Girls	No.	%	Boys	No.	%	Girls	No.	%	Boys
II	8	80.	6	85.7	14	82.3				2	20.	1
III	13	61.9	9	81.8	22	68.7				1	14.2	3
IV	14	70.	4	25.	18	50.				2	18.1	10
V	28	62.2	13	52.	41	58.5				8	38.1	2
VI	32	10	24.3	42	29.7	6	6.			6	30.0	11
VII	63	41.4	27	39.7	90	40.9	3	1.9		17	37.7	11
VIII	30	35.7	12	46.1	42	38.1	1	1.1		6	62.	25
IX	101	90.9	32	86.4	133	89.8				8.5	62.	25
X	47	94.0	3	100	50	94.3				6	2.7	86
XI	7	100.								53	63.0	14
XII	4	100.								10	9.0	5
XIII	116	49.1	55.1	10	1.6	4.6	21	2.5		3	6.	3
To.	347		463				11			247		109
Av.	57.4		55.1				4.6			40.8		35.6
										46.1		42.3

TABLE VII. AVERAGE YEARS OF MENTAL (B.-S.) AND PEDAGOGICAL RETARDATION.

Age.	Boys				Girls				Both Sexes			
	No.	1908	1911	Ped.	No.	1908	1911	Ped.	No.	1908	1911	Ped.
IV	16	4.6	5.1	3.2	8	5.1	6.1	4.3	24	5.0	5.4	3.6
V	17	2.5	2.9	2.5	14	2.4	2.6	1.8	31	2.5	2.7	2.2
VI	43	2.5	2.9	2.8	23	2.8	3.4	2.9	66	2.6	3.1	2.8
VII	99	2.3	2.7	3.4	41	2.2	2.9	3.3	140	2.3	2.7	3.3
VIII	151	2.4	2.7	3.6	66	2.8	3.3	3.9	217	2.5	2.9	3.7
IX	82	2.7	3.0	4.0	25	3.2	3.6	4.4	107	2.8	3.1	4.1
X	111	2.3	2.8	3.8	34	2.1	2.6	3.9	145	2.3	2.8	3.8
XI	48	2.1	2.6	3.8	3	1.7	2.2	3.6	51	2.1	2.6	3.8
XII	5	.8	1.3	3.1					5	.8	1.3	3.1

The question naturally arises, which of the two scales gives the truer measure of intelligence? It might seem bootless, not to say "contemptuous," to raise this question, for it has been asserted that the 1911 Vineland scale had been "mathematically demonstrated" to be "wonderfully accurate even down to a variation of only one or two points"—i. e., from .2 to .4 of a year—that this scale will "tell us to a nicety just where a child stands in his mental capacity," and that it gives us "a remarkably accurate idea of the child's mental development at any age from three to twelve," so that "it hardly needs improvement." It is perhaps not so strange, in view of these and many similar positivistic statements, that a great deal of energy has been expended in inveighing against and in attempting by ridicule to discredit¹¹ the scientific competency of those who have ventured to challenge the grounds on which some of the ex cathedra pronouncements have been put forth as "scientifically demonstrated" facts, and who have attempted to correct abortive and exaggerated tendencies which in the end will undermine the scientific foundations of the work itself. It is a most fortunate omen for the future of this science, however, that a more

11. All this would seem very amusing had no worse weapons been used. But persecution has followed in the wake, misrepresentation has been used to defeat candidates for positions and some who have entered the work as seekers after truth and who have endeavored to correct palpable abuses, have been eliminated from positions. These unethical procedures on the part of professional men cannot be too hotly condemned in a democracy that stands for freedom in letters and science, no less than in politics. The inner history, truthfully depicted, of conflicts and persecutions in clinical psychology during the last half decade would make interesting reading.

sober attitude of critical evaluation has set in and it is becoming possible to question results, and to ask for the same proofs in clinical psychology and intelligence diagnosis as in any other field of scientific effort, without the fear of thereby being denounced as contemptuous dogmatic, intolerant, or ignorant.

The revision made by Binet and Simon in 1911 was probably due largely, if not entirely, to the criticisms which had been made of the 1908 scale. It was pointed out, in particular, that many of the tests were tests of schooling or of experience and not tests of intelligence as such, and that the lower tests were too easy while the higher tests were too difficult. Binet and Simon's 1911 revision, however, has always seemed to us to be very largely theoretical, because it was not based upon the retesting by Binet and Simon of a large number of children in each chronological age embraced in the scale. It has, therefore, had for us a merely theoretical interest, aside from showing that the authors recognized the imperfections of the 1908 arrangement and their desire to overcome them. We have never used the authors' 1911 scale in examining cases.

It was otherwise with the early American revisions. They were all based upon the actual testing of American children, in order to determine whether the French standards were applicable to American children. We made a plea years ago¹² that no American revisions should be attempted until a large mass of data had been gathered by a uniform procedure, namely, the 1908 scale, so that extensive comparable data would be available. We foresaw that the data would be of little value for comparative study unless a uniform procedure was followed. But the revisions and alterations came apace, rather more rapidly than we could digest them, with the inevitable result that many different Binet scales were soon being followed.

The early revisions of the 1908 scale did not seem to us available in the work of practical diagnosis—and all our examinations have been made for this purpose—because the number of subjects was too limited to justify any considerable confidence in the accuracy of the standards. In fact, tests were relocated in ages in which no subjects, or practically no subjects, had been tested. The 1911 Vineland revision merited most consideration, because of the number of subjects tested. It was put out in large editions and immediately came into extensive use, due, no doubt, first, to the fact that it was the first

12. *Danger Signals in Clinical and Applied Psychology*, *Journal of Educational Psychology*, 1912, p. 224-226.

American revision of the 1908 scale, and, second, to the fact that it was said to be so accurate, especially from Age III to Age XII, that little improvement could be effected by further research. The demonstration of almost perfect accuracy, however, was not afforded by the revision itself, for reasons which we have already pointed out and which have been pointed out by others (e. g., Thorndike).¹³ First, the revision was based upon children who had already been tested by the 1908 scale. Second, the changing of the location of the tests did not always agree with the experimental findings. Third, the number of children tested in some ages was entirely too limited to afford a basis for the establishment of norms. No one was tested in age 3, only 8 in age 4 (no revision, however, being made in these ages), 20 in age 14 and 6 in age 15. Moreover, since only the scores were used of those who graded at age the number of children used to set the standards was further reduced. Thus the per cent of passes in Age V for the 114 5-year old pupils could be based only on from 32 to 34 children in age 5, or from 18 to 25 in age 6, or from 7 to 10 in age 7. Fourth, some tests were given far more frequently than other tests in the same age. It is evident that the thoroughness of the testing by the different testers differed considerably. Fifth, the narrow range method of testing was employed, and it is unsafe to standardize tests on the basis of such testing, because it is impossible to determine how the efficiency in the tests will vary through a range of years. Sixth, the tests were made by five different persons, thus introducing the factor of personal variation in the giving of the tests. We cannot, of course, definitely weight the influence of this factor, but Brigham's¹⁴ investigation shows that it may be of considerable moment. These considerations forced us to entertain a reasonable doubt as to whether or not the 1911 Vineland scale was actually more accurate than the 1908 scale. At any rate, we determined to continue to use the 1908 scale for the further study, and also to give the new 1911 tests, so that it would be possible to grade our subjects by both scales.

Berry,¹⁵ it is true, made a comparative study in 1912 of the 1908 and 1911 Vineland scales. He tested 45 normal children in the first four grades and 50 inmates of an institution for the feeble-minded.

13. Problems of Subnormality, 1917, p. 200 f.

14. Carl C. Brigham, Two Studies in Mental Tests, 1917, p. 18 f.

15. Charles Scott Berry. A Comparison of the Binet Tests of 1908 and 1911. *Journal of Educational Psychology*, 1912, 444 f.

The number of normal children who tested at age by the two scales was almost identical, but there were far fewer over-age (advanced) pupils and far more under-age (retarded) pupils by the 1911 scale. When the age rating was computed to fractional points of a year, however, all except 5 of the 95 children tested lower by the 1911 scale. Berry gives a number of reasons, based upon the internal construction of the scales, why the 1911 scale is more satisfactory, but he does not show by objective criteria external to the scales themselves that the 1911 rating gives a more accurate index of the child's intellectual level than the 1908 scale.

How shall we attempt to determine which of the two ratings (1908 or 1911) is the more accurate by objective means exterior to the scales themselves? Two methods suggest themselves. We may check up the B.-S. rating by the results of a series of supplementary psychological tests given at the same time, or by the pedagogical status of the child at the time of the B.-S. examination, as determined either by special graded educational tests or by the grade classification of the child. Owing to lack of time we have been unable systematically to give a sufficient number of supplementary psychological and educational tests to justify us to attempt to utilize this method. We are therefore restricted to a comparison of the child's pedagogical retardation with his B.-S. 1908 and 1911 retardation, Table VII.

The B.-S. retardation was determined by subtracting the B.-S. age from the exact chronological age (the months were always expressed in two place decimals). The child's pedagogical age was determined by the grade in which he was classified in the elementary school when reported to the clinic, on the basis of the following arbitrary age standards: kindergarten, age 5; Grade I, age 6; Grade II, age 7; Grade III, age 8, etc. When the child's grade was reported in quarters each quarter was credited at .25 of a year. Thus Grade II, Quarter 2 was recorded as age 7.5. But only 257 of the grades were reported in quarters. In the case of 29 pupils, no grades were reported. In 26 of these instances the child was assigned to a special school and the grade reported from the special school at the end of the first month was used. Because of the defects in the records, and the small number of cases in B.-S. Age II, III, and XIII, which we accordingly excluded, we are able to tabulate the data for only 786 pupils. The child's pedagogical retardation was then secured by subtracting the age equivalent of the grade he was in from exact chronological age (in years and months).

It is evident that a child's pedagogical age thus determined cannot lay claim to a high degree of accuracy. In the first place, the practice obtains of promoting pupils who have failed in a given grade once or twice in order to give them the advantage of "exposure" to the work of a higher grade, even though they are unable to do the work of that grade. In some school systems pupils are automatically promoted after they have failed a second time. On such a system it would be possible for a feeble-minded pupil to graduate from high school, or even from college, provided he persevered long enough and lived long enough. It is evident that a child's pedagogical age would be rated too high in schools where the practice exists of promoting children whether or not they have done the work of the grade. This practice exists in a limited number of the St. Louis schools. Ordinarily if a child fails to do the work he is required to repeat the quarter. If, however, he is promoted without having done the work he is advanced only one quarter, or at most two quarters. Advancement by quarter should therefore serve to reduce the tendency to promote pupils undeservedly. That some of these pupils had been promoted too high will be shown in another connection.

In the second place, while the above tendency may serve to elevate the pedagogical status of our cases somewhat the assigned pedagogical rating does not always do the pupils ample justice. Some of the pupils had entered school late, some had been very irregular, some had been very little in school, while some, for one reason or another, had not applied the intellectual resources they possessed to the mastery of the school tasks. Some pupils had a higher intellectual level than would appear from the pedagogical rating.

In the third place, the age-grade standards which we have followed are generally regarded as too rigid (Grade I, age 6, etc.), exaggerating the amount of pedagogical retardation. Ordinarily a child is regarded as normal pedagogically in Grade I if he is not over 7 years, in Grade II if he is not over 8 years, etc. The rating we have assigned the pupils exaggerate their degree of pedagogical retardation, in the light of the standards of pedagogical retardation customarily followed.

It is evident, therefore, that the pedagogical criterion by which we would evaluate the two scales is itself not very accurate. We use it in the hope that the inaccuracies it contains, whatever they are, will equally affect the 1908 and 1911 scales.

Turning to Table VII it will be noted that the rating in each B.-S. age is higher by the 1908 than by the 1911 scale by the same amounts as given in Table IV (with negligible exceptions in the three higher ages). The pedagogical retardation is less than the B.-S. retardation in Ages IV and V for the 1908 scale and IV, V and VI for the 1911 scale, while it is greater in all the other ages. That the pedagogical retardation was less in the lowest ages than the B.-S. is evidently due to the fact that there were no grades below the first grade (rated as age 6), or at least below the kindergarten (age 5) in which laggards might have been retained. Had there been grades corresponding to ages three and four, the pedagogical retardation for the lower B.-S. ages would probably have been larger than it is. It is observed, however, that the 1908 retardation in these ages differs less from the pedagogical retardation than the 1911 retardation does, in Age VI the 1908 retardation being less and the 1911 retardation greater than the pedagogical. The general feeling has been that both the 1908 and 1911 scales are too easy in Ages III, IV and V. In Ages VII to XII, where the pedagogical retardation invariably is greater than either the 1908 or 1911 B.-S. retardation, the difference between the pedagogical and the 1908 retardation varies from one year to 2.3 years, and between the pedagogical and the 1911 retardation from .6 to 1.8 years. The 1911 retardation approximates the pedagogical retardation more closely than does the 1908 retardation in all the ages above VI except XII. Thus according to the pedagogical criterion the 1911 scale would seem to be more accurate than the 1908 except in the highest age (we disregard the lower ages, in which the pedagogical data are defective).

Our general impressions from many years' use of the two scales, based on all the data we have gathered on our cases, consisting in some instances of a number of other psychological tests, are largely in harmony with these results. We have felt that the 1911 (Vineland) revision, in spite of its technical shortcomings to which we have already referred and in spite of its apparent defect from the standpoint of scattering, has been slightly superior to the 1908 scale in the lower ages.¹⁶ In the middle ages, say from 7 to 9 or 10, we have been somewhat uncertain as to the relative merits of the two scales, while we have felt strongly that the 1911 was inferior in the higher ages, decidedly so when employed according to the suggestions for its use made in 1913. In spite of the fact that these suggestions have often been

16. The basis of rating alone made the III and IV-year standards more difficult in the 1911 scale.

followed, some writers have continued to diagnose feeble-mindedness on the old XII-year standard, although the individual was given no opportunity to try the tests in the two highest ages. It is evident, therefore, that the 1911 scale (particularly when administered as suggested in 1913) has yielded a larger return of feeble-minded cases on the standard which was proposed and which has been followed, than the 1908 scale, in the case of the older adolescents and adults with whom the higher tests were, of course, crucial for the diagnosis of feeble-mindedness.

The conclusion at which we have arrived may be summarized thus: the degree of superiority of the 1911 Vineland scale over the 1908 scale, in the ages in which it actually is superior is less marked than its degree of inferiority in the upper ages (particularly when applied as suggested in 1913), the tests of which are crucial in the diagnosis of feeble-mindedness of older and higher grade individuals.

We are at the present time using the Stanford revision, and shall hope some time in the future to analyze the data secured from the use of this scale. We may, however, give our preliminary impressions at an earlier date.

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No. 1

With this issue the JOURNAL OF DELINQUENCY opens its third volume. That the past two years have teemed with development in the educational and psychological work which makes delinquency a better understood and better known problem, can hardly be challenged. In glancing through the previous volumes we find studies in social conduct in relation to such factors as intelligence, mental defect, heredity, economic conditions, environmental conditions, unemployment, immigration; reports on important improvements in clinical and research methods; careful analysis of institution reports; and abstracts from the ever-increasing literature of delinquency and its related subjects.

We cannot but feel that the collecting and disseminating of information of this kind will work rapid and constructive reforms in the development of institutions for public charges. It is now generally conceded that delinquency is an educational, not a penal problem; that much in the time-worn methods of discipline and punishment must go; and that our administrative policies must be more and more molded by the growing fund of scientific information.

FRED. C. NELLES.

REVIEWS

SHUTTLEWORTH, G. E., and POTTS, W. A.—*Mentally Deficient Children—Their Treatment and Training.* Philadelphia. P. Blakiston's Son & Co. 1916. (Fourth Edition) pp. 284. Price \$2.50. This well-known text-book on Mentally Deficient Children is inscribed to the memory of Dr. Edouard Seguin, who for forty-two years, both in the old world and in the new, lived and laboured to improve the condition of mentally defective children.

The book itself is too well known to all workers in this field to require any detailed description. It is sufficient that Dr. Shuttleworth is the Nestor of this work in England. He holds, or has held no less than six appointments in institutional and educational work for mental defectives, and has been a trusted adviser of more than one Department of the British Government.

Dr. Potts, it will be remembered, was the medical investigator to the Royal Commission on the Care and Control of the Feeble-Minded, and has done a great work in association with the Birmingham Committee for the Care of the Mentally Defective in the Special Schools of Birmingham.

A fourth edition of the book was rendered necessary on account of the fact that the third edition was out of print, and that the demand for the book among professional and lay workers continues to increase.

One of the best parts of the book is that in regard to educational training, special schools, industrial training and recreation, and the criticism of the results obtained.

At the same time medical and other experts in America will find themselves at home with the authors, and will have few or no criticisms of the book and its recommendations.

The work is pre-eminently a useful one, and may be recommended to all those who are interested in the subject.

The appendix contains a valuable bibliography and a list of institutions in England, both private and public, for mentally defective persons.

HELEN MAC MURCHY.

TERMAN, LEWIS M., and others.—*The Stanford Revision and Extension of the Binet-Simon Scale for Measuring Intelligence.* Educational Psychology Monographs No. 18. Baltimore. Warwick & York, Inc. 1917. Pp. 179. Price \$1.40. This book, for students of the science of mental testing, must be regarded as a supplement to Terman's earlier publication, "The Measurement of Intelligence." As Whipple remarks in his "Editor's Preface" the present monograph takes the reader "behind the scenes," showing him how the revision was made and what have been the data warranting the changes and supplementations.

What is intelligence? How is it distributed? At what rates does it develop? How can we determine the rate at any cross-section? Is the Intelligence Quotient a valid index? What are the sex differences in intelligence? What are the correlations between intelligence and social status, between intelligence and school success? What of the validity of the individual tests? All of the questions are given thorough consideration. In the first chapter we find a brief account of the revision and its history. The last chapter is devoted to a discussion of the essentials in intelligence scale making, and in the appendix are given the statistics on the individual tests.

The chief steps taken in revision procedure were the following: first, the results which all previous investigators had obtained were assembled and classified, and with these as a nucleus a provisional arrangement of tests was devised. Representative groups of children were then carefully selected and the tests thoroughly applied. Verbatim records of the children's responses made it possible for Terman to score and rescore the records until proper age levels were found for the various tests. The one-year's training of assistants and the uniformity of scoring (all done by Terman) made for a reduction of errors.

After a good deal of arduous analysis, selection and elimination the scale was finally left so that the testing of unselected children at each age would yield a median intelligence quotient of 100. "The revision contains six regular tests and from one to three alternative tests in each year from 3 to 10, eight tests at year 12, six at 14, and six in each of two higher groups which are named, in order, "average adult" and "superior adult." The regular and alternative tests total 90, compared with 54 in the 1911 Binet revision. Although many tests have been retained, the procedure and scoring have been altered in many cases.

"While it is not claimed that the revision here offered is satisfactory in every respect, the authors believe that it possesses a number of distinct advantages over other versions of the Binet scale." Among the advantages listed are the correction of the warps at the lower and upper ends, the addition of many more tests, and the more complete and detailed explanations for the giving and scoring of the tests.

Regarding the distribution of intelligence quotients it was found that it conforms closely to the normal probability surface. This fact among many others argues for the validity of the I. Q. as a means of expressing a child's intelligence status. And, although it is maintained that the I. Q. "remains fairly constant until well into the period of adolescence," nevertheless, "it is possible that this constancy may not be maintained with defectives, particularly those of low grade." Emphasis is placed upon the fact that retardation or acceleration expressed merely in terms of years difference has no significance apart from the child's chronological age.

There are no marked sex differences except that the tests show a slight superiority of the girls over the boys. Inferiority or superiority of social status means a resulting difference of about one year, minus or plus respectively, from the median mental age of children for all classes. (One year at 7, two years at 14, etc.) Meumann was mistaken when he assigned as the cause for the differences in the mental ages of children from different social levels errors in the tests rather than a fundamental difference in the levels themselves, a difference of endowment.

The correlations between intelligence and teachers' estimates, between intelligence and quality of the school work are fairly high. It was found that a child with an I. Q. between 70-79 never does satisfactory work in the grade where he belongs by chronological age; that superior children are pedagogically retarded and the inferior pedagogically accelerated. These findings open up new vistas for the educational guidance of children through the grades and into occupations.

The data available throw little light on the influence of maturity apart from the influence of experience which comes with increased age. Three criteria are utilized to examine the validity of a test: do a larger percentage of children pass the test with increasing years, is the test coherent when interpreted in the light of its agreements with other tests in the scale, and does it agree with the teachers' rankings?

In the chapter dealing with considerations regarding the formation of an intelligence scale Terman discusses the definitions of intelligence, the earmarks of a good test (simple apparatus, short time to apply, easy to give and record), the reasons for a multiplicity of tests, the 75 per cent criterion, point scales and other important items.

In 1905, we were given the first rough draft of the Binet scale. In 1908 this crude instrument was greatly improved. In 1911 appeared the first American adaptation at the hands of Goddard, the father of Binet testing in this country. Since then we have had revisions from Kuhlmann, Terman, Huey, Wallin, and others. At the present time, with the validity of the Point Scale brought in to serious question (see criticisms by Otis, Freeman and others), the Stanford revision stands as perhaps the best standardization of the scale we now have. That it is the last word in intelligence testing, none of its authors maintain. With Kuhlman's revision promised, with the recent developments in mass testing, not to mention the devising of parallel scales, of scales of performance tests, and so on, we are now in the flower of the mental testing period.

The book itself is not free from errors which a more careful proof reading might have eliminated. On page 42 the theoretical values for the I. Q. ranges given should be .16, 1.6, 8.5, 23.42, 32.64, 23.42, 8.5, 1.6, .16. (These values were obtained from Thorndike p. 220, *x Q* Tables). These show even closer correspondence between obtained and theoretical values than those given. On page 50 the units on the base line are incorrectly placed. The middle group is made to cover a range of two years, instead of being split up and assigned the same base unit as the other columns in the diagram. These and other errors are not fundamental and do not affect the validity of any of the conclusions.

The monograph should be in the hands of all who are more than superficially interested in the scale.

SAMUEL C. KOHS.

PERIODICAL LITERATURE

BOGARDUS, EMORY S.: THE HOUSE—COURT PROBLEM. The house-court is legally defined by the city of Los Angeles as "a parcel or area of land on which are grouped three or more habitations used or designed to be used for occupancy by families and upon which parcel or area the vacant or unoccupied portion thereof surrounding or abutting on said habitations is used or intended to be used in common by the inhabitants thereof. A habitation is defined to be a room or combination of rooms used or designed to be used for the occupancy of human beings." The house-court is more common in Los Angeles than in other cities of the United States. The rise of land values and the increase of cheap labor gave rise to the custom of building cheap houses after the house-court pattern upon the same lot, and of leasing land to Mexicans and others upon which they were free to build whatever dwellings they chose. In these "shacks" developed the worst kind of housing conditions. According to Jacob Riis, the house-court has given rise to as unsanitary and anti-social living conditions as have existed anywhere in the United States, not excepting the New York tenements. However, the house-court offers for industrial classes, under given conditions, a type of housing which is of superior character for actual living purposes and for homes. Home-courts have been classified as follows: (1) Old Spanish adobe; (2) Shacks; (3) Barrack style of structure; (4) Separate two-room houses; (5) Concrete houses; and (6) Bungalow court. A study of the 1,202 house-courts in Los Angeles (January 1, 1915) gave an estimated house-court population of 16,510. Large numbers are immigrants, especially Mexicans who are unmarried men or married men without their families. Upon 1,200 of the house-courts there were 5,934 habitations. The smallest number of habitations per house-court was 3 and the largest number runs up to 35, 40, or even 50. The average number is practically 5. The house-court inhabitants are largely unskilled laborers, and their annual income is low. Of the seven housing inspectors in the city (January, 1915) three devote their time to the inspection of house-courts. Seventy-five per cent of the new house-courts are of the best type—the bungalow court. They are more attractive than the ordinary flat or apartment and in most ways are superior for actual living purposes and for homes for the people.—*American Journal of Sociology*, XXII-3, November, 1916. pp. 391-399. W. W. C.

BRIDIE, MARION F.: AN OPPORTUNITY CLASS FOR DULL AND BACKWARD CHILDREN. Since the withdrawal of most of the mentally defective children from the normal class, the number of dull, backward children has become more apparent. All children about whom the slightest doubt exists should be examined at between 7 and 8 years of age so that they may have the best chance during their most receptive years. The main causes of

abnormality are physical and mental. Among the physical causes are found ill-health, malnutrition, defective vision, defective hearing, tonsils and adenoids, anemia, etc. After removing the cause, these children may be given a short intensive course of instruction, a kind of special coaching, in a small class by themselves so that, in time, they may return to normal classes. Those children whose backwardness is due to mental abnormality should also be taught in a small special class, where provision can be made for their individual needs. Such a class might well be called an Opportunity Class. This class should be run on what are best understood as Montessori principles, combined with special coaching. All children in these classes should be examined by an able psychologist whose findings would determine the basis of the child's instruction, and the report of the teacher would confirm or correct the decisions. Those, who, although apparently borderline, are really mentally defective or potentially feeble-minded, will be diagnosed within a few weeks. They should be transferred to schools for the mentally defective where similar training is given. After a period of training and coaching many children will be quite fit to return to the normal school. This return should always be made at the beginning of a school term, preferably at the beginning of a school year.—*The Child*, VII-12, Sept., 1917. pp. 631-634. W. W. C.

GOTTO, SYBIL: THE EUGENIC PRINCIPLE IN SOCIAL RECONSTRUCTION. The ultimate progress of society is dependent on the inherent biological quality of the individuals of the human race. Our aim in assessing social values should be to attach higher value to the socially advantageous biological qualities and so assist this selection of types for the positions of economic independence, in order that early marriage and parenthood may be encouraged among the "efficient". It would be to the advantage of eugenic selection if the premium set on the acquisitive faculty would be transferred to the faculty of initiative and constructive ability. Social recognition and honor should be reserved for individuals of proved civil worth. The most efficient members of the race of each generation should be discovered and given all facilities possible to establish themselves in an independent economic position, in order that they may rapidly assume parental responsibility. Income tax should be graded inversely to the size of the family. Possibly money paid for the education and maintenance of children should be exempted from liability to the income tax. This would not only involve the payment of a higher rate of tax by single persons and married persons having no children, but, also be a recognition of the principle which the state should emphasize—the responsibility of parenthood. In the non-income-tax paying classes this debt will have to be recognized by providing facilities for adequate housing accommodation, by a well adjusted scholarship system, by adequate maternity assistance, and by a comprehensive policy of infant welfare. The family should be recognized as the biological unit. This would secure the maximum of opportunity for individual development, which should be the aim of democratic society. If the altruistic ideal is to find its expression in the service of the future, then selection in marriage, that is, selection for parenthood be-

comes the most important action in the individual life, and the foundation of a family must be undertaken with a due sense of responsibility. We must strengthen existing, and devise fresh social customs which shall select and give preference to families of good stock, thus facilitating early marriage and encouraging parenthood. If we are to attach special importance to selection, we must so train the young as to imbue them with a clear ideal of marriage and its racial consequences. Teachers who are thoroughly conversant with the science of eugenics should be secured; curricula which are suitable to the children and adolescents who come under their instruction should be prepared. Legislation similar to that of Norway, establishing responsibility for parenthood on both the father and mother and protecting the illegitimate child, should be enacted and enforced. A certain latitude in divorce is necessary. The bill now before Parliament, formulated in order to allow those who have already separated to have their separation decrees confirmed as divorce after three years can only be beneficial. Approximately a quarter of a million people would be affected by this legislation. The costs of maternity and education are two of the main deterrents to parenthood. Maternity homes and scholarships providing for adequate homes and medical services for parents of fit stock should be provided. With the recognition of the eugenic principle, declaration of fitness for marriage will become the rule and persons suffering from known hereditary defects and communicable diseases will be legally and socially debarred from parenthood. A minimum standard of housing should be adopted, and all municipal housing schemes to provide for those without means of securing adequate housing accommodations should be formed from the point of view of selecting fit citizens as parents. The independent economic position of wounded soldiers and sailors should be established so that they may be able to assume the responsibility of marriage and parenthood. Information on questions of public health, especially infant welfare, preventable disease, and matters affecting marriage and parenthood should be provided for all classes. They should also be informed as to adequate birth intervals and the dangers of venereal disease. Fit persons should be encouraged to have as large families as they can adequately maintain, and unfit persons should be discouraged from being responsible for the creation of defective individuals.—*Eugenics Review*, IX-3 Oct. 1917. pp. 183-205. W. W. C.

HENRY, T. S.: THE EDUCATION AND CONTROL OF THE EMOTIONS. In education little attention has been paid in the past to the feelings and emotions, for the schools have been narrowly intellectual, emotions have been undervalued and the complexity of emotions has made it difficult to formulate a system for their training. Educators are beginning to realize a vital connection and interplay of thought with feelings. Situations producing good emotions should be encouraged, those tending to produce harmful ones prevented if possible. The spread of emotions by suggestion is possible in schools, also the use of art, literature, history and biography may arouse ideas producing good pleasurable feelings. To go through

movements which ordinarily manifest an emotion may cultivate that emotion. Bodily health and activity make for a normal and happy emotional life. One emotion may be prevented by change of attention to a new situation. So an effective mode of control is the formation of attitudes, ideals and sentiments by attaching appropriate ideals to the original emotion as a core.—*Journal of Educational Psychology*, VIII-7, Sept. 1917, pp. 407-415. K. M. C.

KENT, A. F. STANLEY: **FATIGUE AND ALCOHOL.** Fatigue may be regarded partly as a diminished capacity for doing work, partly as a feeling of unfitness and of being below par. Many factors besides labor enter into the causation of fatigue and of these the most important are connected with environment. Factory and home conditions are being improved not only as a humanitarian policy, but also because it pays. Historically, alcohol has been taken principally as an aid to enjoyment and to the zest of social intercourse. Industrial drinking, the persistent taking of small quantities of alcohol throughout the day, is far more harmful to the individual and the race than convivial drinking. The influence of fatigue upon alcoholism is out of all proportion to the influence of alcohol on fatigue. The unpleasant symptoms of fatigue are created not by healthy labor, but by labor under factory conditions—too long hours by tired, underfed workers, whose health is undermined by unhygienic surroundings, whose aspirations and ambitions have been killed, and who often have become mere machines. The worker knows that the physical discomfort caused by these conditions may be diminished by drink. Because the effect is transitory the dose is repeated again and again and industrial alcoholism is established. The taking of alcohol has little immediate effect on the physical side of fatigue, but its influence on the psychical side is more profound. Moderate doses of alcohol affect the organism by stimulating the psycho-motor functions, by depressing the sensory functions, and by decreasing the speed and accuracy of the intellectual processes. Industrial drinking is very prevalent among the waterside and unskilled transport laborers. The characteristics of their work are need for sudden spurts of hard muscular effort and freedom from control as to drinking by their employers. Gas-stokers, glass-blowers, metal-workers, and printers are also very prone to industrial alcoholism. There has been an improvement in recent years among textile workers and boot and shoe makers. Among coal-miners industrial drinking is practically unknown, they are remarkably prone to convivial excess. The alcoholic proclivity among both men and women is less when the work is carried on in large factories than when it is done in small shops, less with time-work than with piece-work, and less when the labor is delicate and skilled than when of the manual kind. The employments which withdraw women from domestic pursuits are likely to increase alcoholism and to increase its greatest potency for evil—viz., its influence on the health of the stock. The influence of prolonged use of alcohol upon general fatigue has been tested in military campaigns and in industrial operations. The results indicate that those who abstain from the use of alcohol can better withstand the rigor of military operations and can ac-

comply more in the industrial field. Among women cotton-winders it was found that the average effect of a day's work in producing fatigue was twice as great among the alcoholics as among the abstainers. However, when considering the output, the average rate of work of the abstainers was 260 bobbins per hour while that of the alcoholics was 275. Some industries are using alcohol as a solvent. As the workers are continually inhaling the vapors, the conditions are such as would lead to the maximum evil effect. Experiments are being made as to the effect of these conditions on the fatigue and output of the worker, and also on his health and general well-being. Harmful industrial drinking should be treated as a scientific problem and the cause of intemperance attacked. Conditions determine fatigue; fatigue induces men to drink. Clearly the attack must be made on conditions. The true cure for alcoholism is the provision of decent surroundings in factory and home, adequate wages, leisure and relaxation, clubs, recreation rooms, indoor and outdoor games—in short, the elements of a healthful, full and interesting life in place of a mere existence without interest, pleasure or hope.—*British Journal of Inebriety*, XV-2, Oct. 1917, pp. 49-68. W. W. C. KING, EDGAR: THE MILITARY DELINQUENT. Of 250,704 enlistment contracts of 1908-1913 inclusive, approximately 30,000 or 12 per cent of the total number, were terminated because of military delinquency. Many of these deserted the service. Analysis of the causes of delinquency in 1000 cases showed the following principal factors: psychopathic constitution, 200 cases, 20 per cent; youth (usually in association with other factors) 80 cases, 8 per cent; habitual drunkenness (before enlistment), acute alcoholism, constitutional inferiority, each 7 per cent; chronic alcoholism, 4 per cent; relatives, women, each 3 per cent; dementia praecox, 2.5 per cent. Other factors included cerebral syphilis, epilepsy, mental deficiency (moron grade), drug habit, and manic-depressive psychosis. The following are suggested for reducing military delinquency: (1) increased knowledge among medical and line officers as to its causes; (2) increased efficiency in the recruiting system toward the elimination of the unfit; (3) use of best efforts possible to reduce intemperance in the army. Most of the cases of alcoholism began their excesses prior to enlistment.—Quoted from *Mil. Surg.* 37: 574-78, Dec. 1915, in *Mental Hygiene*, 1-3, July 1917. pp. 433-434. J. H. W.

PUNNETT, R. C.: ELIMINATING FEEBLE-MINDEDNESS. By use of Hardy's formula for the number of heterozygous individuals in a mixed population there are found to be, in addition to the 3 per 1000 feeble-minded, 10 per cent in the general population capable of producing feeble-minded children but not showing the defect. The highest possible rate of elimination is a selective elimination of all dominants or recessives of a mixed group at 50 per cent per generation, thus reducing a proportion of one in 100 to 1 in 1000 in 22 generations, from 1 in 1000 to 1 in 10,000 in 68 generations, from 1 in 10,000 to 1 in 100,000 in 216 generations, and from 1 in 100,000 to 1 in 1,000,000 in 684 generations. With 3 per 1,000 feeble-minded in the population it would require 250 generations or 8000 years to reduce the proportion

to 1 in 100,000 and 4 times that long to reduce the proportion to 1 in a million. This is a sure method but very slow on account of the "hidden feeble-mindedness". "Is it not likely that the Binet-Simon or other proper tests would show that carriers of mental defects exhibit a lower mentality than pure normals?"—*Journal of Heredity*, VIII-10, Oct. 1917. pp. 464-5. K. M. C.

WARNER, CHARLES H.: HANDLING CASES OF IMPROPER GUARDIANSHIP. The investigator of improper guardianship cases should always suspend judgment until he has heard both sides of the trouble. He must know the law on the subject, be able to observe conditions quickly and accurately, and retain this observation for future use. Every complaint should be studied before the investigation is begun not only to formulate some idea concerning the complaint itself, but also to determine what agencies may be expected to cooperate in the case. An investigator should not be influenced by what he feels or thinks others expect him to do in any particular case. Usually the prosecution will be based upon the investigator's own complaint in court and upon him will eventually rest the success or failure of the prosecution. Although the investigator goes out with police power, he should respect the laws protecting the home, no matter how degraded or humble. He must have, as a basis of judgment, at least a minimum standard of cleanliness as well as of food, clothing, shelter, and medical attention which he believes is not neglectful. Incomplete investigations and poorly presented evidence prejudice the court and brings discredit to this kind of activity. The courts may be educated to this work (1) by detailed information as to the conditions found; (2) by bringing the children into court in the condition they are found at home; and (3) by taking the judge to the home and letting him see for himself. Investigators working in rural districts have another trouble to face, i. e., justices of the peace, who often do not understand the work or do not care to bear the responsibility of making a decision in a case. Those handling cases of improper guardianship are trying to readjust the social maladjustment—to cause unfit home conditions to be so improved that children may remain in their homes under proper conditions of health for all. Investigation of these cases should be founded upon the theory that the agent is seeking prevention rather than prosecution.—*National Humane Review*, V-8, 9. August, September 1917. pp. 145, 151, 173, 179. W. W. C.

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A STUDY OF DELINQUENT AND DEPENDENT GIRLS.

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The object of this study was to furnish data for a more scientific classification and treatment of the inmates of the State Training School for Girls, Geneva, Ill., an institution for the training of delinquent Girls. To this end the study was conducted in a manner calculated to utilize all available data. Besides the psychological examination, each girl was allowed to give an account of her life history and her version of the cause of her delinquency. The data thus obtained were compared with the official case records and with such additional facts as the administration had been able to gather from correspondence and interested parties. The superintendent and resident physician were making close observations on the behavior of each individual girl and the effects of the training secured. These data which they generously contributed were invaluable in checking up the accounts given by the girls themselves.

The psychological examinations were conducted by the authors during the months of July, August and September, 1915. Two intelligence scales were used, viz: the Faribault Revision of the Binet-Simon Scale of general intelligence, by Dr. Fred Kuhlmann; and the Stanford Revision by Dr. L. M. Terman. Of the first named revision the entire scale was used without modification, excepting that a score of three was allowed for each test passed in the fifteenth year. Tests from the twelfth to the eighteenth year inclusive were taken from the Stanford Revision and cases passing above the mental age of ten were given an opportunity to continue as high on the scale as their ability permitted. The scoring for these higher tests has been made according to the directions for the 1916 Stanford Revision. The object in using the higher tests was to gain, if possible, additional data for the diagnosis of the higher grade and borderline cases which present difficult problems to officials charged with the responsibility of training and parole of delinquent girls.

The entire population of the training school, including new admissions, during the period the examinations were going on, a total of 432 girls were examined. Thus, so far as the institution itself is concerned, the cases were unselected and representative of the class of girls committed to this institution. Among delinquents it might be expected to find a high degree of unreliability in the stories told concerning their own behavior. In all but approximately two per cent of the cases, however, the information volunteered by the individual girls proved to be correct. It had been observed that a girl on entering the Home may tell a story in strict accord with the facts, but that later this story may be modified or entirely changed. The stories, as modified, usually bear a striking resemblance to the more romantic and adventurous experiences of some of the inmates with whom the girl in question has later associated. The most untruthful stories were those told by girls afflicted with hysteria.

There was some effort made on the part of the girls tested to communicate the nature of the tests to their friends. Local conditions both promoted and prevented this coaching among the inmates. The institution was built on the cottage plan with twenty-five girls in each cottage. Wholesome competition was encouraged by the management in the matter of athletics, academic, industrial and social achievements. When the testing began naturally enough the competitive spirit spread to include intelligence achievement. Since, however, the rivalry existed between cottages there was no communication from one cottage to another and since there were only twenty-five in each cottage it was possible to have them all tested before there had become established a system of communication. It is quite probable, however, that such communication as existed was as much an hindrance as an advantage to the subject. In a number of cases it was evident that the tests had been wrongly communicated so that there existed some difficulty in making the readjustment when the test was correctly presented. In such cases as the subject profited by coaching she proceeded sufficiently far on the scale above the test communicated to render the communication ineffectual. In only a few of the higher tests did the communication appear to be effectual, and it is improbable that classification was seriously effected at any part of the scale.

DISTRIBUTION OF CHRONOLOGICAL AGES

Fig. 1. shows the distribution of chronological ages for the 432 girls on date of examination and also on date of admission to the institution. Line "A" is the median for the age at date of examination and line "B" is the median age of admission. The median age on examination was fifteen and two-thirds years; on admission 14.1 years or almost exactly 14. Approximately 13 per cent are committed before the age of puberty; the greatest number of commitments occurring at the age of 14. None are committed after the age of 21 and only 5.5 per cent are found in the Home after the age of 18. Thus commitment takes place shortly after the age of puberty and final discharge or parole occurs during the period of adolescence. The difference between the median age for admission and the median age for the population is approximately 1.6 years. This difference is not far from the average time each girl spends in the institution. Average time does not mean much, however, since there is great variation in the length of time each individual remains at the school.

The administration was making special effort to meet the needs of each individual girl and to have the cases committed remain in the institution as long as it could be of direct benefit to them. Parole depended largely on home and environmental conditions.

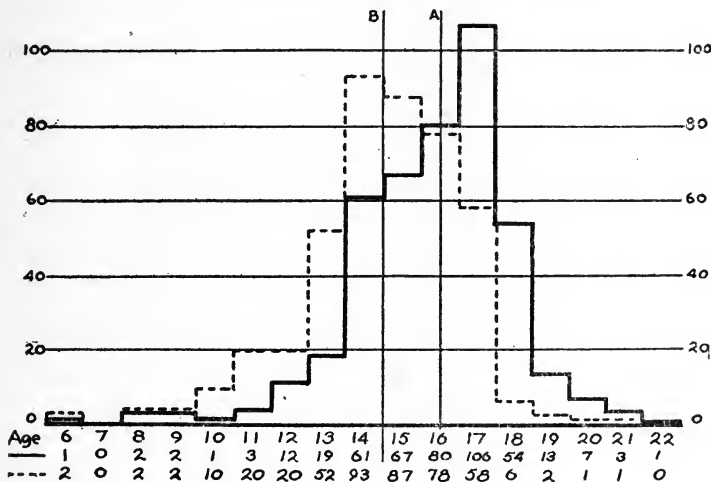


Fig. 1. Distribution of Chronological ages of 432 girls on date of admission, and on date of examination.

III	II	I	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5
	1	6			1																			
	0	7																						
2	1	8			1				1															
0	1	9									1													
1	2	10									2													
1	1	11											1		2									
2	12	12				1						5	3	1	2									
2.5	19	13									1		3	6	6	3								
3.0	60	14						3			4	2	4	9	14	11	7	3		3	1			
4.0	67	15				1	1			1	3	1	7	10	8	8	12	3	9	2	1			
4.1	80	16					1	1			3	4	11	7	23	11	12	5	2					
5.2	106	17						1	2		3	2	14	18	22	15	9	6	13		2			
4.4	54	18	1				1	1	1	1	3	3	6	6	11	4	4	3	7	1	1			
4.7	13	19					1			1	2	3		2	1	2	1							
4.8	7	20								1		1		1	3	1								
4.0	3	21									2													
7.0	1	22							1															
TOTAL	L	-	-	2	2	4	6	5	4	22	20	52	58	93	54	46	21	31	6	5	-	-	-	-

Fig. 2. Distribution of mental ages of 432 delinquent and dependent girls.

DISTRIBUTION OF MENTAL AGES

Fig. 2. shows the distribution of mental ages. Mental age is given in half years as indicated across the top of the table. Chronological ages are given in column I at the left. Column II gives the number of cases retarded at each chronological age. Column III gives the average mental retardation in years for each respective chronological age. The squares included by heavy lines running diagonally across the page contain the number of cases testing at age. All cases falling to the left of these enclosed squares test below age. All to the left of the dotted line drawn parallel to the heavy line are mentally retarded over three years. Two hundred and fifty cases are thus retarded over three years and if three years' mental retardation is the criterion of feeble-mindedness, then this number, or 57.8 per cent of the 432 girls examined are feeble-minded; 114 cases, or 26.3 per cent are three years

retarded and of doubtful classification; 62 or 14.3 per cent are one or two years retarded and thus backward; 6 test at age and are, therefore, normal. According to recent studies the mental ages of public school children should fall symmetrically on either side of the heavy lined enclosed squares so that at least one-third of the total number would be found above and to the right, and approximately this same proportion below and to the left of the heavy lined squares; whereas in this table it appears there are none above the diagonal but an undue proportion below and toward the left hand corner of the table away from the diagonal where the average number should be found. The tabulations thus show that the individuals composing this group of girls have been drawn from the lower half and chiefly from the lower fourth of the public school population.

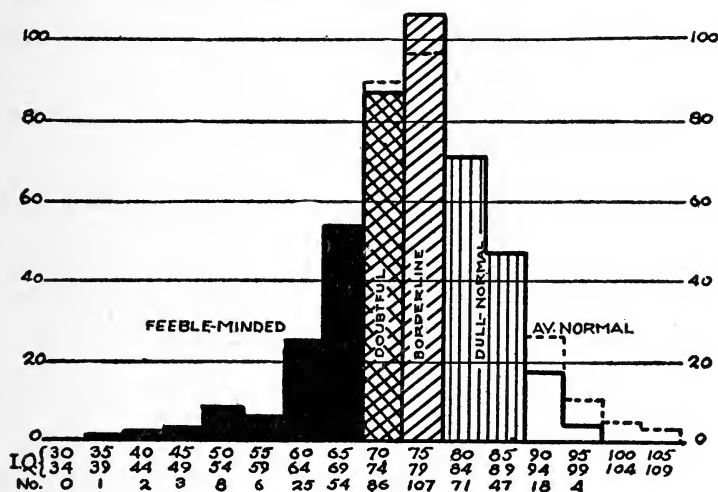


Fig. 3. Distribution of intelligence quotients of 432 delinquent and dependent girls.

DISTRIBUTION OF INTELLIGENCE QUOTIENTS

The intelligence quotient is a finer designation of retardation and mental status than the mere number of years retarded, and thus furnishes a more scientific basis for diagnosis and classification on the basis of intelligence. Fig. 3. gives the distribution of intelligence quotients for the 432 girls studied. The shading indicates the classification into feeble-minded, borderline, dull normal, average normal,

and superior normal as suggested by Dr. Terman, with the exception, however, that cases testing between the I. Q's .70 and .75 are designated as doubtful rather than borderline. This minor variation was made because in the opinion of the examiners the cases falling at this mental level were more definitely feeble-minded than borderline. The dotted line indicates the shape the curve would take if based on the Stanford Revision.

According to the classification made, 99 girls or 22.9 per cent are definitely feeble-minded; 86 or 19.9 per cent are doubtful; 107 or 24.7 per cent are borderline; 118 or 27.3 per cent dull normal; 22 or 5 per cent are average normal, and none superior normal.

If, however, the intelligence quotient .75 is regarded as the lower limit of normal intelligence then the first two numbers above should be combined making a total of 185 cases or 42.8 per cent feeble-minded. This percentage is, in the judgment of the examiners, more nearly correct than that given on the basis of the .70 I.Q. standard. There were a few cases above the I.Q. .75 who despite the numerical result of the tests were diagnosed as feeble-minded, likewise there were a few below the I.Q. .75 who were classed as borderline, but the number of cases above the standard nearly equaled the numbers below so that the total number classed as definitely feeble-minded was 168 or approximately 39 per cent. These percentages, it may be observed by reference to Fig. 3., would be changed slightly for the higher grades if based on the results of the Stanford Revision.

TABLE I. PERCENTAGE OF CASES IN EACH INTELLIGENCE GROUP.

	F. M.	Doubt.	Bord.	D. Nor.	Av. Nor.
Total population of Home.....	22.9	19.9	24.7	27.3	5.0
Negroes eliminated	21.3	20.8	24.6	28.3	5.1
Hysterical persons eliminated.....	20.4	19.1	27.0	25.2	5.5
Dependents eliminated	18.3	16.9	27.3	32.2	5.0

On the whole there were few discoverable secondary factors which might have entered in to effect the intelligence of otherwise normal girls. They were apparently well nourished and the resident physician certified all but 15 per cent to be in good health. There were 36, however, who were pronounced hysterical and 47 belonged to the negro race, but when this number is eliminated the classification for

the remaining number is approximately the same as for the entire population of the Home, as may be seen from Table I.

The only significant changes are those resulting from the elimination of the dependents. With this elimination the number of delinquents in the feeble-minded and doubtful groups is 7 per cent less. The group of dull normals is increased by 4.9 per cent, the borderline 2.6 per cent.

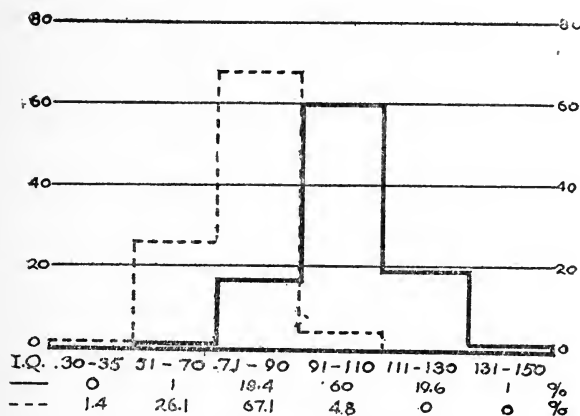


Fig. 4. Intelligence quotients of 905 public school children (continuous line) and 432 delinquent and dependent girls (dotted line).

The meaning of the curve as represented in Fig. 3. takes on added significance when compared with a similar curve for public school children. Such a comparison may be made by reference to Fig. 4 which shows two graphs; one made out for 905 unselected public school children¹ between the ages of five and fourteen, and one made out on the same basis, showing the percentages of the 432 delinquent and dependent girls that fall in the same relative levels as the public school children. The solid line graph shows that one per cent of the public school children fall between the intelligence quotients of .51 and .70, 18.4 per cent fall between the I.Q's .71 and .90, 60 per cent fall between the I. Q's .91 and 1.10, 19.6 per cent fall between the I. Q's

1. Terman, L. M., and others. The Stanford Revision of the Binet-Simon Scale and some results from its application to 1,000 non-selected public school children. Jour. Educ. Psych. Nov. 1915. p. 556.

1.11 and 1.30, 1 per cent fall between the I.Q's 1.31 and 1.50. The dotted line graph shows a distribution much different. 1.4 per cent of the delinquent and dependent girls fall lower than any of the public school children or between the I.Q's .30 and .50. 26.1 per cent fall where only 1 per cent of the public school children fall, or between the I.Q's .51 and .70, 67.1 per cent fall between the I.Q's of .71 and .90, and 4.8 per cent fall between .91 and 1.10, and none falls above this level. Reference to the two graphs shows that the curve for the delinquent and dependent children is much skewed to the left, 95.2 per cent of the cases fall no higher than the lowest 20 per cent of the public school children. It appears, therefore, that this group of dependent girls is from the standpoint of intelligence, drawn from the lowest fifth of the public school population.

DISEASES

The general health of the girls studied was good, and diseases liable to affect mentality or behavior were present in not over 15 per cent of the cases. Thirty-five were tubercular, 99 or 22.9 per cent were venereal, 36 were pronounced hysterical, two were insane, and four epileptic or epileptic equivalent. Hysteria and insanity are perhaps the only diseases found among this group of girls that could be said to have affected their behavior and mental reactions to any considerable extent. The tubercular patients were segregated and given out-door employment and all but four were apparently recovering. The cases of venereal diseases were for the most part not of long standing and not severe enough to affect mental processes. The two cases of insanity, in the judgment of the examiner, were also feeble-minded.

Hysteria seems to have been detrimental to the cases affected from the point of view of social and moral behavior as well as from the standpoint of mental reactions.

The hysterical patient is indifferent to social conventions and insensitive to moral ideals while at the same time she manifests mental traits that differentiate her from the normal or feeble-minded person as measured by the scale of intelligence. Immoral tendencies are common among hysterical girls. Twenty-three of the 36 hysterical inmates were known to be immoral and the behavior of the remaining 13 was such that fear for their morality on the part of parents or

officials was the chief reason for their being committed by the courts. This situation is not in the main different from that of the whole number of inmates, except that the attitude of the hysterical girl is inclined to be callous and unappreciative of the disgrace to an extent beyond that common to girls of the same level of intelligence. The tendency of the hysterical girl is rather toward immorality than the reverse. Virtue with them is more a matter of chance than the result of training or character. Instinctive aversions to familiarities leading to sex indulgence are lacking. Contrary to common assumption, the group of girls pronounced hysterical were reported to be in good health. All but two were of the average size and normal development. Aside from the behavior incident to the disease of hysteria, this group of girls was characterized variously as: untruthful, unstable, vicious, tendencies to self-mutilation or suicide, violent fits of temper, emotional, foolish, or stupid. Probably not all of these terms would apply to any one individual of the group, but, in general, the characteristics are applicable to the girls afflicted with hysteria. In general intelligence this group of girls is not markedly different from the delinquent girls as a whole. Nine are definitely feeble-minded, 11 are doubtful, 5 are borderline, 11 are dull normal. Mental processes, however, as indicated by reactions to the tests show some striking deviations. Slight difficulties appear to the subject to be insurmountable, and fear of making errors at times almost amounts to complete inhibition. Logical sequence of ideas is not commensurate with the clearness with which they perceive isolated facts and progress on the scale is likely to be irregular.

FORMAL EDUCATION

Fig. 5 shows the distribution in school grades according to chronological ages. Roman numerals across the top designate school grade. The Arabic numerals in the left hand column indicate chronological ages. The numerals in the several squares designate the number of girls of a certain age who have reached the grade as designated at the top of the column. The heavy lined squares running diagonally across the page indicate where all should be were they up to grade. Only three are up to grade. One is a year advanced, and all others are retarded. If, however, pupils are considered psychologically retarded only when they are two years behind grade, then all to the

right of the dotted line are in proper standing and all to the left are retarded. In this case 9 per cent of the girls have made normal progress, and 91 per cent are below standard. Average retardation for the 432 cases, considering eighth grade the normal amount of schooling, is three years.

	O	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
6	1												
7													
8		1	1										
9			1										
10				2									
11					1	1	1						
12		1	1	4	5	1							
13		1	1	6	5	5		1					
14		2	8	9	10	14	5	6	7				
15		2	2	7	16	8	11	9	10	1		1	
16		1	2	13	16	11	12	18	7			1	
17		1	2	13	23	18	12	15	18	2		1	1
18		4	2	9	7	9	8	8	7				
19				2	4	3		7					
20		1		2	1	3		4					
21			1	1		1							
22			1										
Tot.	1	14	22	68	88	74	49	47	53	3	-	3	1

Fig. 5. School grades reached, by ages, for 432 delinquent and dependent girls.

Fig. 6 shows three curves of distribution indicating the present school status; what it would be were the girls up to standard and what the status might be on the basis of mental age. The unbroken line "A" indicates the actual distribution of the 432 girls through the grades. The broken line "B" represents the distribution that would exist were the subjects graded in school according to mental age, and

assuming that a mental seven enters the first grade and advances one grade each year. The line "C" indicates the distribution which ought to exist were the girls normal and entered school at seven years of age, and progressed one grade each school year through public school, high school, and college; thus the unbroken line "A" represents the actual state of affairs, the broken line "B" where the girls might be if they had progressed according to mental age, and the dotted line "C" where they would stand on the basis of normal progress. Lines a, b, and c show where the respective medians fall. It is thus seen that this group of 432 girls is mentally incapable of making normal school progress. The median for the present school status falls approximately five years behind the median possible to normal girls, and their capacity as indicated by intelligence level permits them to lessen this difference by only one year. They would, therefore, still be four years retarded even though they had progressed in school as far as their intelligence would permit.

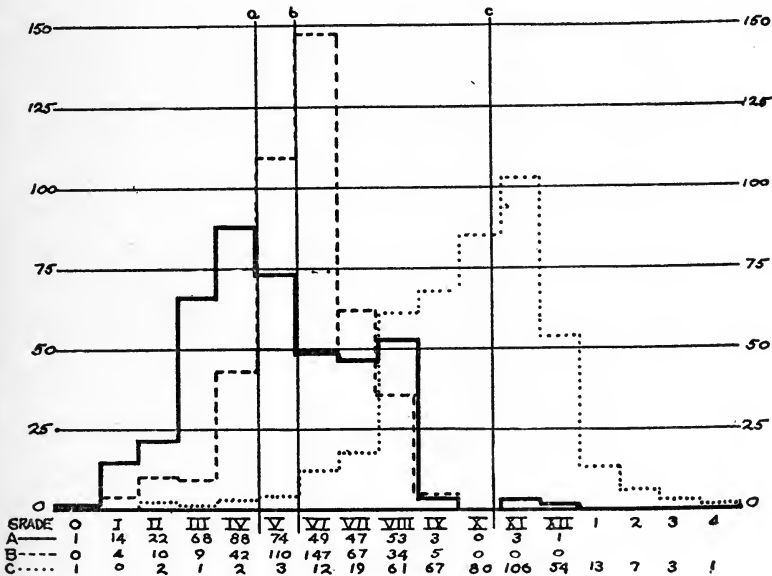


Fig. 6. School status of 432 delinquent and dependent girls.

CAUSES OF PEDAGOGICAL RETARDATION

There are several possible reasons for the pedagogical retardation of this group of girls, chief among which are the following: (1.) Lack of the necessary encouragement and control on the part of the parents or guardians; (2.) Lack of sufficient mental capacity to perform the school tasks and to keep pace with the average school child; (3.) A school curriculum poorly adapted to the special needs of the child below average intelligence.

Data are not at hand for drawing definite conclusions as to the amount of parental neglect. But judging from the social status of the parents, the number of broken homes and the relatively few years spent in school on the part of the girls examined, it may safely be assumed that lack of parental control, or parental inefficiency is involved in the majority of cases.

By far the most frequent and significant cause of pedagogical retardation is low grade intelligence. This is evident from Figure 6 which shows that the median for mental level falls approximately four years below the median for school grade based on chronological age.

A study of 1200 feeble-minded children shows that very few with an I.Q. below .60 pass above the fourth grade in academic subjects, that practically none with an I.Q. of .70 complete the seventh grade, and only occasionally does one with the I.Q. of .75 pass above the eighth grade². Assuming these results to be general, feeble-mindedness would account for the pedagogical retardation of 42.8 per cent of this group of girls.

Concerning that group of school children testing between the intelligence quotients of .75 and .90, Dr. Terman finds "that they cannot make ordinary school progress or master other intellectual difficulties which average children are equal to. Those testing 80 and 90 will usually be able to reach the eighth grade, but ordinarily only after from one to three or four failures."³

Of the 432 girls studied there are 22 or 5 per cent with intelligence quotients above .90. Thus it would appear that 95 per cent of the pedagogical retardation is due to low grade intelligence, and that only 5 per cent of the girls possess sufficient intelligence to pursue successfully courses in high school or college.

2. Unpublished lectures on the pedagogy of the feeble-minded, by the writers.

3. Terman, L. M. *The Measurement of Intelligence*. p. 92.

The fact that these girls are not, as a whole, mentally capable of successfully pursuing the conventional training outlined in the accepted school systems does not mean, however, that they might not have profited materially by some other form of training. Neither does it indicate that society has functioned to its highest capacity in training this group of girls. Many of them have not attended school as much as they should, and many others who have taken all the formal training their intelligence has permitted them to acquire, might have received much greater benefit from a different sort of training.

Since approximately 95 per cent of the girls here studied belong to that intelligence class which progresses in the school grades at a rate much below that of the average public school child, it becomes clear that the public schools, as now managed, do not deal wisely with the lower one-fourth of their population.

The backward child or the child of less than average intelligence is usually inclined to progress more rapidly in some subjects than in others, and infrequently finds it quite impossible to progress at all in some one subject. If it is attempted to hold back such a child until he can pass in the subject most difficult for him, he becomes discouraged and manages to leave school altogether. To meet the needs of this class of pupils, a more flexible system of promotion is needed. The school should be so organized that each individual child could advance in any one subject as rapidly as his mental capacity might permit and, at the same time, progress in one subject should be independent of the rate of progress in every other subject of the course. In certain instances it would be found necessary to permit a pupil to drop some subject altogether. Under such an arrangement the sum-total of a defective child's training would be greater and he would not meet with discouragement as readily as if he were obliged to bring all subjects of the course up to a given standard before being promoted to another grade. This would tend to keep the child in school and, in the course of development, give him opportunity to reveal any special traits or abilities he might possess.

But promotion by subject or even omitting subjects, for which a child may prove to have no ability, would not solve the whole problem. The girls dealt with in this study need specific training, both in the matter of establishing wholesome ideals of behavior within their mental vision, and in the matter of some agreeable occupation

which they can take up immediately on leaving school at the age of sixteen or later. The problems which these girls have presented in connection with their schooling are largely social, and teachers undertaking their training should be of a high order, their responsibilities being both numerous and complex. The field of their activities would require that they be as familiar with the girl's home life as with her school life. Education or training independent of the social life of these girls could not, in the nature of the situation, become effective. Girls thus provided for would tend to lead more respectable lives. The dull normal would be much better equipped for meeting the situations of ordinary life, and consequently less liable to become immoral. The feeble-minded would, by the age of sixteen, have given such clear evidence of their mental condition that they could without further trial be continued as state wards permanently under some form of custody. The borderline cases would likewise be more easily dealt with under a school system calculated to meet the needs of the individual. At present, the girl or boy who does not like school and who expresses a desire to "go to work" commands, quite generally, the sympathy of all concerned. This was quite evident from the histories of the girls here studied. If, however, the school is equipped for training the girl to "go to work" there would be more pressure brought to retain them in school until such time as they had manifested their fitness or unfitness for some form of life activity. There would naturally enough, however, be a number of borderline cases who would pass undetected, and thus enter society as normal individuals much as they do now, but, by virtue of the special training received, better prepared to cover up their defects. Such girls would marry and thus tend to perpetuate their kind; and in so far as this takes place the individualized school course would miscarry and work against, rather than for, the welfare of the race. This miscarriage of individualized training would undoubtedly be slight and could be obviated by a department of clinical diagnosis as a part of the school system.

In general the histories of the 432 girls studied show the causes of pedagogical retardation to be sociological and psychological. The girls have not attended school as much as they should because of family and social conditions and, on the other hand, when attending school, they have found the subjects assigned them uncongenial to their grade of intelligence.

Approximately 40.8 per cent are retarded because of feeble-mindedness, and all but 5 per cent belong to that class which fail in school work above the eighth grade. The histories further indicate that much of this retardation could be prevented if the schools were organized to meet the specific needs of children below average intelligence.

CAUSE OF COMMITMENT.

The cause or causes leading to the commitment of a girl to the state training school are not definitely known. The court papers do not go into detail, but merely state that the girl is committed on account of "delinquency," "incorrigibility," etc. The real cause of the girl's behavior, however, which is usually a complex affair involving many factors, is not made a matter of record. From case records and from information gained from officials, the offenses enumerated in Table II seem to be the specific ones for which the girls were committed.

TABLE II. REASONS FOR COMMITMENT

Offense.	No.	Per Cent.
1. Immorality	280.....	64.9
2. Incorrigibility	79.....	18.2
(Unmanageable, 51; truancy from home, 18; from school, 10.)		
3. Dependent	48.....	11.1
4. Unfit home	13.....	3.0
5. Stealing	6.....	1.4
6. Murder	1.....	0.23
7. Attempting suicide	1.....	0.23
8. Forgery	3.....	0.70
9. Impersonating a man.....	1.....	0.23

359 or 83 per cent of the inmates were known to have been immoral, and 173 or 40 per cent were afflicted with venereal diseases.

INCORRIGIBLES.

Seventy-nine, according to their own stories, were difficult to manage and have been classed as incorrigibles. Of the seventy-nine, eighteen ran away from home, fifty-one misbehaved generally, and ten ran away from school. The girls who ran away are of a distinctly lower type of intelligence than the ones who are unmanageable. Of the twenty-eight who ran away or ran the streets, all but two were either feeble-minded or borderline. Of the fifty-one who are unmanageable, fourteen were doubtful feeble-minded, ten borderline, and

seventeen average normal. Not very much significance can be attached to these particular forms of delinquency. In most cases running-away, truancy or misbehaving is only one expression of existing conditions that are generally bad. For example: the home conditions are only slightly worse among the runaways than for other delinquents, and immorality is approximately as prevalent among one group as among another. The one significant fact is that the girls of lower intelligence run away more frequently than do girls of higher intelligence.

UNFIT HOMES.

Thirteen of the girls, it appears, according to their own accounts and from official sources, were committed because of bad home conditions. In five of the homes the mother was actively immoral; in four cases the child was badly mistreated by the step-mother; in one case the parents quarreled excessively; in one case the mother was insane, and in one case the father was excessively alcoholic.

DEPENDENCY.

Forty-eight of the 432 girls have been committed because they were dependent. One hundred and eight cases were classed as dependents or had no home, but since all but the forty-eight had committed some offense that was the immediate cause of commitment, they have been classed according to the offense committed. The forty-eight girls classed as dependents were less than thirteen years of age at the time of commitment and are on the average of the same general mental level as that of the delinquent girls.

STEALING.

Of the six girls committed for stealing none were immoral or diseased. All behave well, and adjust well to the new situation in the Home. They differ from the three girls who have committed forgery, in that they are not found to be untruthful. Low general intelligence, however, places three in the class of the doubtfully feeble-minded; one as borderline, and two as dull normal. A brief summary of two typical cases follows:

S. V.: Age 13, mental age 9 yrs. 6 mos. I. Q. .71, school grade III. Home conditions not good. Stealing \$4.50 brought the general conditions surrounding the child to the notice of the authorities, and the child was sent to the Home as a precaution against further evil

that might befall. At the Home she is quiet and obedient, but adjusts herself poorly, and is thought to be stupid.

S. R.: Age 17, mental age 12-6, I. Q. .84, school grade VIII. Home conditions questionable. This girl kept house for her father and attended school at the same time. She stole money from people outside her own family, and on being punished for the act, became resentful and ran away from home. At the State Home, she behaves well and gives no trouble, but is thought to be stupid. According to the psychological examination this case is dull normal without any qualifications.

In three of the cases committed for stealing, lack of sufficient intelligence to make adequate adjustments to the ordinary situations in life is the most probable cause of the delinquency. One borderline case was actually, according to reliable information, taught thieving by a parent. In the remaining two cases there is no discoverable cause for the delinquency, aside from inadequate early training.

FORGERY.

Three girls were committed for forging checks. There is very little similarity in the mental characteristics of these three girls aside from the element of untruthfulness which is common to all three. The data obtainable on the cases are given in connection with each case as follows:

H. N.: Age 18, M. A. 11-6, I. Q. .77, school grade VIII. Home conditions reported to be good; the father was a plumber, the mother kept the home. There was one sister who posed for movies. H. N. worked as cashier in a dry goods store where she acquired the habit of thieving and at length forged a check. At the State Home she is incorrigible and very untruthful. The psychological examination showed the case to be erratic and uneven in mental processes. Although she had graduated from the eighth grade of a city school-system at 14 years of age, she was very ignorant. On the other hand she showed considerable constructive ability and achieved some of the tests classed as superior normal. With the higher tests added she would be classed as almost average normal. There was, however, a manifest lack of judgment characteristic of feeble-mindedness.

W. D.: Age 18, M. A. 11-8, I. Q. .79, school grade III, Father German descent, mother a mixture of Indian and White, married in

her 14th year to an Italian miner. The circumstances of the forgery are not clear, but it appears that she was induced to make the attempt on the ground that she would receive part of the money. The woman states that she knew it was wrong but that she never thought of being arrested. At the Home she is regarded as lacking in self-control, untruthful, and of dull mentality. According to the psychological examination this case should be considered high grade feeble-minded. In the performance of the tests there is nothing to the credit of the subject above that indicated by the score given, viz: I. Q. .79, but the general responses were below rather than above that characteristic of persons testing as borderline.

F. G: Age 16, M. A. 12-6, I. Q. .84, school grade VII., home conditions fair. This girl left school to go to work in an office. In the capacity of assistant bookkeeper she made out checks and in doing this it appears that she forged her employer's name. There is, however, some evidence that the employer was involved in the matter and that the forgery was not done on the girl's own initiative. At the Home this girl is thought to be very bright, but an "incorrigible liar". The psychological tests revealed no exceptional trait or deviation. On the Faribault Revision she grades as dull normal, with the higher tests of the Stanford Revision added she grades average normal.

The circumstances surrounding the crimes of forgery are sufficient to explain the delinquency. Early training has not been good. The families from which the girls come are poor and large, consisting of eight or nine members each. When the situation offering relief from economic stress arose, low intelligence, ignorance, and lack of established aversion to wrong doing, all contributed toward making the act of forgery easier of commission. When there is added to these circumstances the very highly probable facts that in each case the girls were influenced by stronger personalities who were themselves directly interested in the crime the situation becomes more clearly one of circumstances.

ATTEMPTED SUICIDE.

B. A: Age 17, mental age 11-8, I. Q. .79, school grade III, was reared by her aunt. History not known. Health good, but tubercular tendencies. This case attempted suicide because of disappointment

in marriage. At the Home she is quiet and adjusts well to her surroundings. The psychological examination reveals nothing aside from a rather low level of intelligence. The suicidal attempt was probably the result of temporary emotional excitement and confusion.

MURDER.

F. G: The only murder case, age 16, mental age 11-2, I. Q. .75, school grade III. Little is known concerning this case aside from the fact that in her fifteenth year she assisted her step-father in the murder of her mother. The supposition is that she was in love with her step-father, but this is not definitely known. At the Home, she is characterized as sly and under-handed. The psychological examination reveals nothing aside from the fact that she is of low grade intelligence, and should not be classed higher than borderline. In behavior, she is modest, kindly disposed, and presents the general appearance of a somewhat accomplished and refined lady.

IMMORALITY.

Sexual immorality is the most frequent and, with the exception of the one case of murder, the most serious offense for which girls are committed to the Training School. The conditions which lead to this form of delinquency are usually considerably complicated, but, in general, immorality is the result of low intelligence, lack of suitable early training or unfavorable environment, and improper associates.

The girls studied seemed to fall naturally into groups on the basis of intelligence and general attitude toward the offense committed. These groups are briefly characterized in the following account:

IMMORALITY BETWEEN INTELLIGENCE QUOTIENTS

.48 AND .55.

T. R: Age 19, M. A. 7 yrs. 4 mo., I. Q. .49, school grade, I. Father a moulder. Prior to their commitment T. R. and her imbecile sister had not attended school at all and had become a general nuisance in their neighborhood. T. R. naively thinks a man in whose company she remained out during one night is her husband and quite evidently is intellectually incapable of comprehending her error.

R. Q: Age 15, M. A. 7 yrs. 2 mo., I. Q. .48, school grade 0. Father a machinist. R. Q. became pregnant by a neighbor, and although she has been confined at a maternity hospital, she is not aware that she has given birth to a child.

S. T: Age 17 yrs. 3 mo., M. A. 8 yrs 2 mos., I. Q. .53, school grade II. Father a drayman. Mother dead. The step-mother treats the children well, but S. T. prefers to be out late with immoral girls and boys. Concerning her commitment, S. T. states: "I was sent here just because I wouldn't get cute with the police. They asked me, but I said 'No Sir.' " The sister of this girl is also immoral

B. R: Age 16 yrs. 3 mos., M. A. 7 yrs. 4 mos., I. Q. .49. Mother dead. Father a railroad wrecker, excessively alcoholic, and abusive to his children. When asked why she was in the Home, this girl laughed and replied, "was bad with boys and men. Father wanted me to be with him, but I wouldn't. I have four sisters and they are all bad—but the littlest one—worse than I am." The term "bad" as here used by this girl does not signify that she had any moral conception of her misdemeanor. On the contrary, immorality to her was a matter of indifference.

B. P: Age 18, M. A. 7 yrs. 9 mos., I. Q. .52, school grade I. Had not attended school before coming to the Home. Mother kept a hotel and ran away with a boarder. This girl wouldn't stay at home, kept bad company, and gave birth to one child which she claims a doctor gave her medicine to kill. B. P. has a sister also committed to the home on account of immorality.

The foregoing brief sketches are characteristic of a class of fourteen girls. They are too low in the scale of intelligence to comprehend the real situation. Some of them do not know that sexual intercourse leads to child-birth. One girl has given birth to a child and does not know it, although she was confined in a maternity hospital. Another girl states that she was given something to drink by a man, and that she went with him to a room. Concerning what happened in the room she does not have a very clear conception, but states that she woke up the next morning outside the door on the street. Regarding her misfortune, this girl complains that she was sent to the Home "because of an old man." There is no comprehension or regret concerning her condition.

The histories as related by the individual girls of this group all bear evidence that the initial steps leading to immorality were accomplished by a consciousness wholly innocent of the nature of the behavior into which their acts were leading them. If the girls were the aggressors, their behavior was instinctive and spontaneous, wholly

lacking in consciousness of purpose and without design. The whole situation is painfully pathetic and analagous to that of a seven or eight year old child being subjected to the advances and enticements of mature adults.

IMMORTALITY BETWEEN INTELLIGENCE QUOTIENTS

.56 AND .70.

This group of fifty girls ranging in intelligence from the I. Q. .56 and .70 have in general been led into immorality through their associates, who are the direct or immediate causes of their delinquency. These girls are intellectually aware of the consequences of their acts, but not in a way to make their behavior a matter of much concern to them. Individual histories show that they have come in contact with life situations which called for training and intelligence they did not possess.

The following are examples:

W. A: Age 15, M. A. 8 yrs. 6 mos., I. Q. .57, school grade II. Father a section hand. This girl states she was immoral with three boys and one old man, just because they asked her. She kept company with these persons without the knowledge of her mother, who first learned of the girl's behavior when she became diseased.

S. A: Age 17, M. A. 8 yrs. 5 mos., I. Q. .56, school grade III. Father works in a blast furnace. Mother ran away when this girl was thirteen years of age. S. A. went to work in a match factory at the age of fourteen. While in the factory she became associated with immoral girls, and through their influence became immoral with boys.

S. A: Age 18, M. A. 9 yrs. 5 mos., I. Q. .63, school grade III. Father a conductor on the railroad. Concerning her schooling and behavior this girl states: "They sent me to kindergarten, but they would not let me into the school until I was thirteen. I stayed out all night with my fellow; my sister didn't like it and she sent me back here. The first time I was here, my foster-mother married and her husband didn't like me so had me sent here."

IMMORALITY BETWEEN INTELLIGENCE QUOTIENTS

.70 AND .75.

The girls of this group manifest a degree of intelligence and general comprehension seemingly sufficient for self-direction in ordinary

life. But when the individual histories are analyzed and compared with the results of the laboratory tests there appears to be lack of self direction, absence of control, and a tendency to follow blind impulse not common to normal girls of similar training and opportunities.

On the intelligence scale they may drop slightly below the I. Q. .70, or may rise higher than .75, but the majority fall near .73. The following three cases are fairly typical of this group of girls. They realize their situation in an intellectual way, but on the whole, the morale of their condition has little real meaning to them. Their mental horizon is too limited to admit of a reasonable perspective, and they do not feel deeply enough to be conscientiously disturbed over matters of even the greatest moral significance.

Examples:

T. F: Age 17, M. A. 10 yrs. 9 mos. I. Q. .72, school grade III. Father machinist. Mother immoral, and deserted her husband to live with another man. T. F. has worked in a cigar factory, where she became associated with immoral girls who dared her to be immoral. She has been twice paroled. In her last position she became pregnant by her employer. At the Home she is considered stupid, irritable, sullen, defiant, and incorrigible.

L. D: Age 18 yrs. 2 mos. M. A. 10 yrs. 9 mos. I. Q. .72, school grade IV. Father shipping clerk. Home relations pleasant. Left school at fourteen while in the fourth grade, went to work in a knitting mill at winding thread. Later, worked in a canning factory. While working at the factories, L. D. became associated with immoral girls. She left home, and in company with two other girls, obtained a room and entertained boys. L. D. states that she had previously been immoral for money, which is very unusual for this grade of intelligence unless special outside influence has been brought to bear. At the Home, this girl is considered feeble-minded, stupid, and untrustworthy. In the family there are six other children, two of whom are probably feeble-minded; one is twelve and in the third grade at school, the other is thirteen and in the fourth grade.

IMMORALITY BETWEEN INTELLIGENCE QUOTIENTS
.75 AND .85.

When the intellectual level represented by the I. Q. .75 is passed, the mental attitude and general reaction of the individual girl changes. Girls of this mental level understand that they have by their behavior alienated themselves from respectable society. They are, however, not very much concerned over the matter. On the other hand, there seems to be an element of adventure and excitement in the life which appeals to them and over-balances any regrets they may normally have entertained. They are mentally capable of ordinary achievements such as grammar school and the various trades, but they do not seriously consider their future welfare. They live in the present and look very little beyond the immediate future. Whether this mental attitude is due to inherent intellectual capacity, early training, or the lack of some special trait is a matter of speculation. The most that can be said in the absence of more accurate data is, that such a mental constitution as is indicated by the above description exists. Whether this mental constitution is an expression of original nature or has been built up through the experience of the individual is a matter of some doubt. In the opinion of the writers, the fundamental factor in the behavior of this group of girls is lack of general intelligence, that is, the absence of a controlling intelligence. Special traits or impulses, common to all persons, but ordinarily under control, gain the ascendancy and render the relatively small amount of intelligence possessed ineffectual in the control of fundamental behavior.

Examples:

D. B: Age 19, M. A. 11 yrs. 2 mos. I. Q. .74, school grade VIII. Father a jockey. Mother a seamstress. D. B. was a telephone girl for two years. She is hysterical and very immoral. The account she gave of herself, aside from the facts above given, was entirely false. In general conversation, D. B. appears normal, but flighty. In the opinion of the writer this girl would have passed higher in the intelligence scale, had she not been hysterical.

G. C: Age 16, M. A. 11 yrs. 5 mos. I. Q. .77, school grade VII. Father works in a lumber yard. Mother washes. G. C. left home and lived with another girl, for which behavior she was sent to the House of Good Shepherd. After being released from the House of Good Shepherd, she worked in a pie factory two weeks and then ran away

again and lived with a man. After passing through the hands of the juvenile court, she was sent home where she remained two days, and then ran away and roomed with a girl one week, during which time G. C. was a prostitute.

W. F: Age 16, M. A. 12, I. Q. .80, school grade VI. Father a teamster. Home conditions probably fair. W. F. has never worked for money. She was immoral with one boy eighteen years old to whom she was engaged. Parents objected to the marriage on account of the age of the boy, and W. F. was sent to the Home where she is reported to be incorrigible and unreliable.

IMMORALITY BETWEEN INTELLIGENCE QUOTIENTS

.85 AND .95.

Besides the above mentioned group of girls there is a fourth group roughly corresponding to the intelligence group of average normal, but including some classed as low or dull normal. The individuals of this group are not more sensitive concerning their behavior than are any of the girls of the groups mentioned, especially do they appear callous to their behavior if they have continued in immorality over a long period of time. Their histories show, however, that they have been reared under most unfavorable conditions and that they have been led into delinquency through circumstances that might be considered largely accidental. Their early life and training is perhaps not worse than the average home affords for this class of girls. But the intelligence they possess is sufficient to warrant better behavior under more favorable circumstances, and in the absence of any indication that they possess traits calculated to lead to immorality, these girls have been classed separately as those who might have grown up as moral beings under average normal life conditions.

Examples:

F. E: Age 17, M. A. 13 yrs. 5 mos. I. Q. .88, school grade, third year high school. Father alcoholic, works in a restaurant. Mother owns a bake-shop. F. E. has ushered in a theatre, done housework, and worked as lady-barber. She prefers barbering because this brings her more money. When asked if she had gotten into trouble with boys, she replied in a very matter-of-fact way: "O! no, I have gotten

beyond that stage." This girl is extremely nervous, immoral, and diseased.

W. V: Age 16, M. A. 13 yrs. 6 mos. I. Q. .91, school grade V. Father a janitor. While at school, W. V. became associated with immoral girls, ran away with boys and stayed at hotels. This girl has apparently had a good mother and a pleasant home. She has a pleasing appearance, is well behaved, and is kindly disposed. Her immoral experience extended over a period of but a few weeks, and at the time of the examination she seemed to be thoroughly ashamed of her conduct, and resolved upon better behavior. She was thrown in with a group of wealthy boys and girls who were immoral. Reports at the Home were entirely favorable.

W. E: Age 17, M. A. 14 yrs. 2 mos. I. Q. .94, school grade, fourth year in high school. Father a mechanical blacksmith. While at high school, W. E. became promiscuously immoral and diseased. It appears that somehow a group of high school students became imbued with a pseudo-philosophy of free-love and proceeded to live it out to the letter. This girl is, otherwise, apparently a person of good ability and good sense.

In addition to the four groups above mentioned, there are a few cases that do not seem to classify on the basis of intelligence. They are not numerous, but from the nature of their histories it would appear that their number in the world at large is considerable. It is also possible that the number actually in the institution is much greater since it is not always possible to determine how a person may have been treated in early childhood, or to what extent the present mental constitution is innate or acquired. The cases concerning which definite information was obtained fall into two classes, viz: those who have been trained in immorality before the age of puberty and at the age when the girl is too young to understand the significance of the act, and those who seem by nature to prefer a life of immorality and dissipation.

Examples of these two classes are given as follows:

V. O: Age 8 years, M. A. 6 yrs. 9 mos. School grade 0. Used by a lodger for immoral purposes. The abuse of this child was not discovered until she became diseased with syphilis.

B. E: Age 16, M. A. 12 yrs. 9 mos. I. Q. .83, school grade VI. Father a mechanic. Mother has been immoral, but is reported now to be making an "honest living." B. E. was immoral all through her school years, with the consent of her mother. She finally became involved in a forgery made for the man she was supporting by her illicit earnings, and to whom she was engaged. On the eve of being arrested she ran away to a house of ill fame where she became infected with venereal diseases.

This girl shows some sign of hysteria, but her behavior in the Home was normally good. She is neat, artistic, and very aesthetic in dress and taste. The indications are, that with a good home, she would not have been immoral. To date, she has been two years on parole at domestic work and is reported to be doing well.

P. A: Age 19 yrs. M. A. 13 yrs. 10 mos. I. Q. .87. (Stanford Revision I. Q. 100) school grade VIII, and 2 years in business college. Father not known. Mother a prostitute. P. A. was reared by foster-parents who were highly respectable and gave her every advantage of an education, but P. A. does not seem to have appreciated her opportunities or to have taken kindly to the life her foster-parents desired her to lead. While at business college she associated herself with fast company. According to her own story, she was drugged by some men companions who abandoned her in a public place much diseased. Instead of resenting this treatment she ran away from the Home before she could be cured of the diseases with which she was infected, and returned to a life of dissipation. P. A. is a strong, healthy girl, slightly above the average size, and moderately attractive. In disposition, she is quiet, accepts an unpleasant situation gracefully, but is sly, deceitful, and untrustworthy.

PROGNOSIS.

The problem of delinquent girls is perhaps without question the most serious one confronting society, and yet it is one concerning which no effective solution has been found. The legal profession has made some progress away from the idea of punishment, but the courts have not been successful in reforming their juvenile charges. Training schools and reformatories have achieved only a small

measure of success. The pedagogical profession can hardly be said to have made an effort at even understanding the situation. The psychologist has been able to offer some helpful suggestions, but society has not taken serious note of them. In the meantime, nature is taking its course while society attempts corrective measures that have little effect in remedying the situation.

In general, as indicated from the data obtainable on the cases here presented, the girls committed to the Illinois State Training School for Girls are, for the most part, not regarded by the court as criminal. They are, on the other hand, regarded as children not responsible or accountable in the eyes of the law for the acts which they have committed against society. This is a new departure in legal procedure in the case of minors, which had its beginnings about eighteen years ago. Under the existing management of the Home, this principle was fully recognized, and the superintendent was committed to a constructive, reformatory policy. Effort was being made to educate and train, and the element of punishment was eliminated. The training given was academic, domestic, and commercial. The academic training corresponded to the first eight grades of the public school. The domestic training was calculated to train the girls to keep up a home efficiently, or to work as a domestic. The commercial training was equivalent to that of an ordinary business course based on graduation from the eighth grade. The girls were observed individually by the managing officer and the resident physician with a view to providing training suited to the individual needs, and an effort was made to retain each the most unstable period of her life, and is thus called upon to meet girl in the institution as long as it seemed desirable. An officer visited the homes of the girls and investigated the places offering to receive girls on parole. There are however serious difficulties in the way of even partial success in the matter of reforming delinquent girls. The main difficulties which have appeared in this study are outlined as follows:

1. A girl who has erred in sex matters is not readily forgiven by society, especially the strata of society into which the reformed girl should be placed. Such a girl could not be sent to high school

with safety, and colleges require a clean moral record for admission, thus, while a few of the delinquent girls would like to go on to college, this social attitude excludes them as it does from various other avenues of life, so that the opportunities of a girl who has been immoral are much limited.

2. A girl who has been immoral does not readily recover the necessary wholesome attitude and respect for marital relations.

3. The known laws of the psychology of habit are rather against than in favor of the reform of a girl who has indulged in promiscuous intercourse.

4. The delinquent girl enters, and leaves the reformatory during the difficulties of serious adjustment at a period when the girl in normal life is, and should be under the care of parents.

5. The problem of reform is complicated by the presence in the reformatory of individuals of a low degree of intelligence. When the feeble-minded must associate with the normal, reform becomes quite impossible. With the cottage system this difficulty is lessened by the possibility of segregation on the basis of general intelligence and degree of immorality.

6. The object of reform is the protection of society and the race, and a girl once infected with syphilis is not a fit subject for rearing offspring.

7. In the nature of the situation the majority of the girls paroled are placed in families as domestics. But there is danger to any home from taking in a reformatory girl. They are liable without provocation to accuse the male member of the home of improper conduct, and such accusations are usually believed by the public who do not understand the behavior of some of these girls, especially the ones afflicted with hysteria or nervous tendencies. Thus, although a man may sustain a reputation for the highest moral rectitude, his reputation may be lost and his family suffer the stigma of disgrace. To protect the girls from society it is necessary to place them in good homes, but it is, at the same time, quite essential that the homes be protected from the girls placed in them.

8. Diagnosis, without psychological examination, is liable to error. Some officials have become convinced that sex immorality

on the part of a girl, is a sure index of feeble-mindedness; while others have not grasped the significance of feeble-mindedness and are liable to over-estimate the intelligence of high-grade and borderline cases. Many of the higher grade feeble-minded simulate the manner and thought forms of normal people to such an extent that under conditions of ordinary life, defectiveness is not apparent. It likewise frequently happens that feeble-minded persons may be so constituted that they use the utmost of the intelligence they possess to the best possible advantage, and thereby raise to the highest possible efficiency the limited amount of intelligence at their command. At crises that come in all ordinary lives, however, these persons fail as do all others of their class.

9. The persons charged with the care and training of the delinquent girls are not specially trained for their work. The caretakers or matrons have no special qualifications. The office of "Superintendent" is a political appointment, and the tenure subject to the vicissitudes of politics. The grade teachers are ordinary teachers certified by the State Civil Service Commission. Thus, girls needing the consideration of persons of the greatest skill and highest efficiency are turned over to persons who are untrained for their work.

The foregoing outline is not a complete enumeration of all the conditions which stand in the way of successful reformation of delinquent girls, but it represents the main ones that have appeared in the course of this study. The situation is, however, not altogether hopeless. There are certain psychological and social factors which operate in a way favorable to the reformation of delinquent and immoral girls. These factors are enumerated as follows:

1. A large proportion of the girls committed have come from inferior homes and the contrast of these homes with the clean and wholesome living conditions of the institution cottages leads the inmate to desire a more wholesome life.

2. While the persons in charge of the inmates are not properly trained for their work, natural selection operates in a way to eliminate the most unfit and to select a few who by nature are endowed to sympathize in a wholesome way with the girl who has gone wrong.

3. Not all of the girls received in the institution have become

habitually delinquent or immoral, and some are thus amenable to discipline.

4. A number of the girls have been mistreated by parents or guardians and are not psychologically delinquent. These girls, however, stand in need of protection rather than reformation.

On the whole, however, prognosis concerning the 432 girls here studied is not favorable. About forty per cent are of such low grade intelligence that they seriously retard the reformation of the remaining inmates of the institution, and should themselves be under permanent custody or parole. Approximately thirty per cent are, because of disease, temperament, or habits, not liable to reform. The remaining thirty per cent are somewhat more hopeful and give promise of becoming fit for citizenship. They are, however, problem cases to which the nine difficulties above enumerated apply in large measure to each individual of the group.

Data are not at hand for making safe forecast concerning the probable future social behavior of even the most promising individuals, but in the light of such data as could be obtained, viz: the individual histories, the conduct while in the institution, and the psychological examination; it appears to the writers that not over thirty per cent of the entire number of girls studied are liable to become average well-behaved and desirable members of society.

SUMMARY OF CAUSES OF COMMITMENT.

384 of the 432 girls studied have committed some offense against the best interests of society. In the above sections it has been attempted to present the underlying conditions giving rise to the various forms of delinquency, and to point out the common characteristics of each group found; a brief summary follows:

Stealing, 6 cases; due to feeble-mindedness, training of parents, or associates.

Forgery, 3 cases; due to the influence of interested parties and is confined to persons of borderline or low normal intelligence.

Attempted suicide, 1 case; due to unstable mentality.

Murder, 1 case; real condition not known.

Immorality is confined to no one class but is common to girls of every grade of intelligence from high grade imbecile to average

normal intelligence. The mental attitude of the girls of the various levels of mentality differs markedly.

Group I, Intelligence Quotient 48-55, fifteen cases: These cases do not understand the moral situation involved; are not over sexed, but have been imposed upon by unscrupulous adults. The situation is analagous to that of using a child of 7 or 8 for immoral purposes.

Group II, Intelligence Quotient 55-70, ninety cases: This group of girls comprehend the situation in an intellectual way, but their own individual behavior is not a matter of much concern to them; pride of person is lacking, and they have met situations for which their intelligence is inadequate.

Group III, Intelligence Quotient 70-75, eighty-one cases: This group of girls apparently possess intelligence sufficient for self-direction, but the moral aspect of their behavior has little 'meaning' to them. They do not feel deeply, and their intellectual perspective is not sufficient to comprehend sex morality.

Group IV, Intelligence Quotient 75-85, one hundred and ten cases: This group of girls realize quite fully that their behavior alienates them from respectable society, and in a limited degree desire to be respectable, but the more adventurous life appeals to them and over-balances any tendency they may have toward better conduct.

Group V, Intelligence Quotient 85-95, fifty-three cases: These girls have become immoral because of unusual circumstances, and not because of lack of intelligence or because of any discoverable immoral traits.

Group VI, Intelligence Quotient 83-95, six cases: Girls who appear to prefer the immoral and dissipated life.

Group VII, Intelligence Quotient 60-84, four cases: Girls trained in immorality before the period of puberty.

In general the girls have come from poor homes or homes inadequate to meet the social needs of adolescent girls. A large number have sought the streets for entertainment and company or have been forced, out of economic necessity, to work in factories; in either case, they have been thrown in with immoral associates, and have themselves become immoral. In practically every case classed in the first

four groups the girls have become infatuated with some young boy near their own age, and not possessing adequate intelligence for controlling otherwise legitimate impulses, their instinctive desire for male companionship has led to immoral conduct. Only four of the entire number had become prostitutes.

The problem of delinquency is not so much one of cure as it is one of prevention. The process of cure is costly and the results unsatisfactory. The whole situation calls for diagnoses of mentality during the early years of school life, and more adequate facilities for training the dull normal child, thereby directing the lower one-fourth of the public school population into the channels of life and industry for which they are by nature best fitted.

If the schools were well equipped for diagnosing and training the moron and the dull normal it is a safe prophesy that delinquency and immorality among young girls would decrease by half.

SUMMARY.

1. The median age of admission is 14 years. Median age for the entire population on date of examination was 15.6 years.

2. If the I. Q. .70 is considered the lower limit of normal intelligence then:

22.9 per cent are definitely feeble-minded.

19.9 per cent are doubtfully feeble-minded.

24.7 per cent are borderline.

27.3 per cent are dull normal.

5.0 per cent are average normal.

0 are superior normal.

If the I. Q. .75 is considered the lower limit of normal intelligence then 42.8 per cent are feeble-minded, none doubtful, and the remaining classification as above given.

3. The intelligence of the 432 girls studied corresponds approximately to that of the lowest one-fifth of the public school population.

4. The general health of the girls is average.

5. The girls as a whole are much retarded pedagogically. The median for present school status falls five years behind the possible median based on chronological age.

7. The chief cause of commitment is immorality.

6. Histories indicate that the girls have left school because the school courses were not suited to persons of low intelligence.

8. On the basis of intelligence and mental attitude, the girls separate into five classes. 58 per cent of immorality is due to low grade intelligence and 69 per cent of all offenses is due to low grade intelligence.

9. Prognosis is not favorable, but if the schools were provided with a department of clinical diagnosis, and more adequate facilities for training pupils of low grade intelligence, prevention would take the place of cure.

MENTAL ABILITY AND FUTURE SUCCESS OF DELINQUENT GIRLS.

RUDOLF PINTNER AND JEANNETTE REAMER

Ohio State University

To what extent are the results of our mental examinations prognostic of future progress in the world? In general we know that there is a decided correlation between general intelligence and ability to succeed, in the sense that men of superior ability are in the main very successful, men of medium ability are only moderately successful and those of inferior ability are more or less failures. There are, however, many other factors besides general intelligence, helping to determine an individual's success in life, and we all know of numerous exceptions to the general statement that ability is correlated with success. The more homogeneous the group of individuals studied, the less likely is it that the small differences in mental ability, revealed by our tests, will be prognostic of future success.

A small group of delinquent girls was tested by the writers and an estimate of their ability to make good in the world was obtained. This estimate allowed some measure of the relationship between the results of our mental tests and success in later life to be made. The girls tested were all wards of the Big Sisters Association. They were girls referred to the Association by the Juvenile Court Judge, and for the most part had either been guilty of sexual immorality or were in danger of becoming immoral owing to the environment in which they happened to live. However no girl is received into the Home, unless in the opinion of both the Judge and the Matron, there is evidence of possible reformation and no girl is accepted the second time if she has run away or willfully gone back to her previous way of living.

It was the aim of the Association to keep the girl in the Big Sisters Home until a suitable place could be found for her. This type of girl is not the hardened delinquent. Many of them, indeed, are only technically delinquent, because often it is the environment rather than the girl herself that is at fault. In a sense, therefore, we are dealing with a fairly homogeneous group, and the homogeneity consists in this instance of failure to conform to certain social requirements in sexual matters.

Twenty-six cases will be dealt with in this study. The coefficients of mental ability as determined by the Yerkes-Bridges Point Scale are as follows:

C. M. A.	No. of Cases.
1.00 to 1.09	7
.90 to .99	7
.80 to .89	8
.70 to .79	4
Total	26

It will be noted that the range of mentality is not very great. We have no extremely low coefficients although there are many poor ones. Individuals of very low intelligence do not appear because they would be recognized as feeble-minded and not accepted by the Association. On the other hand there is almost an absolute lack of any good coefficients.

In a general sense we see here a relation between inability to make the conventional adjustments and ordinary or poor intelligence, that is, we have a group of girls who have failed to make good and who are of mediocre intelligence, in as much as there are no individuals of exceptional ability. Our problem then is to see whether any correlation exists within this small group.

Using the method of classification suggested by one of us ^{1, 2} we have the following distribution:

Bright	1
Bright-Normal	2
Normal	9
Backward-Normal	5
Backward	7
Backward-Feeble-minded ..	2
Feeble-minded	0
Total	26

By using the two methods of diagnosis, that is, the Coefficient

1. Pinter, R. The Mentality of the Dependent Child. Jour. Educ. Psych. VIII-4, 1917. pp. 220-238.

2. Pinter, R., and Toops, H. A. A Chart for Rapid Computation of Point Scale Scores. Jour. Delinq. II-4, 1917. pp. 209-210.

of Mental Ability and the Three Percent Hypothesis, we are able to distinguish borderline groups and thus give a finer distribution of the individuals. Some individuals come so near the arbitrary line drawn between the groups that it is very hard to diagnose them. In some cases a more lenient method of diagnosis, such as the Three Percent Hypothesis places the individual in the group higher up. Such cases are the ones we have placed in the borderline groups, i. e. Bright-Normal, Backward-Normal, and Backward-Feeble-minded. This distribution makes more evident the mediocrity of the group in that the majority of the cases are at the lower end of the group.

The ranking of the cases according to their ability to make good is extremely difficult. In some instances the data upon which to form a judgment were extremely meager. A great deal of the data were obtained from one individual and the bias of this individual's judgment is evident in the conclusions which the writers drew from the data.

The cases were ranked by the two writers independently. A. was familiar with the girls and had compiled their histories, B had tested several of them but had no special knowledge of them and, indeed could not recall the individuals from seeing the names, so that B's ranking was entirely dependent upon the histories compiled by A. In addition the cases were ranked by C, the matron of the Home, who had an intimate knowledge of each girl, and who, in addition, had furnished A with many facts about the girls. It will be readily seen that C's opinion of a girl's success influences the history and indirectly, therefore, the opinions of A and B.

The correlations calculated by the rank difference method are as follows:

Mental ability and A's judgment	= + .33
" " " B's "	= - .02
" " " C's "	= + .03
A's judgment " B's "	= + .68
" " " C's "	= + .68
B's " " C's "	= + .51

The correlations between the tests and any individual's judgment are low, whereas those between the judges themselves are fairly

high. Let us examine the first three correlations. A's judgment correlates highest with mental ability. A is a psychologist, has tested some of the girls, knows some of them fairly well and has investigated their cases. A has had the benefit of several peoples' opinions in regard to the girls, which would give her a more unbiased opinion of the girls than the other judges would have. C's judgment shows no correlation with mental ability. C is the matron of the Home and has intimate knowledge of each girl's life and character. The writers believe that C's ranking was determined very largely by a consideration of a girl's ability to conform to moral standards. In addition C seemed to be largely influenced by pleasantness of disposition and ease with which the girl gets along with people rather than success as judged by the world at large. If this is so, it would appear that, within the prescribed limits of our group, the degree of mental ability is no criterion of moral behavior. A girl of normal intelligence is almost as likely to continue her immorality, given an environment favorable to such a life as is a girl of somewhat less than normal intelligence, excluding definite feeble-mindedness, of which we have no cases. B's judgment, like C's, again shows no correlation. B's ranking was made entirely from the written reports of the cases collected by A. Combining the ranking of the three judges and correlating this new ranking with the C. M. A. gives a correlation coefficient of $+.16$.

The correlations between the rankings of the three judges themselves are all positive and fairly high. If the ranking of the girls by the three judges had been made entirely independently of each other, this agreement might have been very significant. It loses much of its significance, however, when we remember that to a large extent A and B had to rely upon the opinion of C, the matron, as to a girl's success in the outside world.

An examination of some of the particular cases, in which the ranking of the judges differed radically from the ranking according to mental ability, is interesting. The five cases of greatest difference between the ranking of each judge and the C. M. A. ranking have been studied. This gives eight girls, since the same girl often appears in the list of more than one judge. The cases are as follows:

- G. D. C. M. A. 1.03 Normal. Sent to Girl's Industrial School.
Ranked low by all three judges.
- A. D. C. M. A. 1.08 Normal. Deplorable home conditions. Ranked
low by two of the judges.
- G. S. C. M. A. .96 Normal. Immoral. Ranked low by one judge.
- In these three cases the judges rank the girls a great deal lower than the mental tests. All of the cases suggest a continuation of immorality. The judges are evidently strongly influenced by the immoral behavior of the cases.
- G. H. C. M. A. .74 Backward. Works for Mrs. H., doing well.
Ranked high by three judges.
- A. O. C. M. A. .70 Backward or F. M. Returned to mother, doing well. Ranked high by two judges.
- G. W. C. M. A. .71 Backward. Married. A splendid worker.
Ranked high by two judges.
- N. B. C. M. A. .82 Backward. Went home to mother, doing well.
Ranked high by one judge.
- H. S. C. M. A. .80 Backward. Doing well in box factory.
Ranked high by one judge.

In all these cases the history says the girl is doing well. All the girls are below normal, although none are definitely feeble-minded. The fact that the girl was reported as doing well undoubtedly made the judge rank her high. It will be noticed, however, that all the cases, except one, are under the care of the mother or some other guardian, and it is undoubtedly the sheltering influence of some kind of a home that has helped them to avoid temptation.

CONCLUSION.

The result of our study is negative, in the sense that so far as this group of girls is concerned, the mental tests were not prognostic of their success after leaving the Big Sisters Home. Considering the cases as divided into two groups, normal and backward, we find that the backward group is just as likely to make good as the normal. Our study lacks a sound objective criterion by which to measure success in the world. Owing to the circumstances the emphasis was laid upon the moral behavior. This is undoubtedly to a very great

extent a condition dependent upon the environment, and it would seem that the type of girl studied, whether normal or backward in intelligence, has not the ability to protect herself against an unfavorable environment.

In regard to the practical situation of the relationship between the psychological clinic and the social worker, the writers regard these results as significant. It would seem that the child diagnosed as backward by our scales has as much chance of making good in some sphere or other as the child diagnosed as normal. The backward as well as the normal ought, therefore, to be referred to such homes and agencies without giving either the preference. It may be that the backward child succeeds because the social agencies may have a greater number of simple positions that would be suitable for such cases and which might be of doubtful value for more intelligent individuals. But this leads us to the problem of the correlation between the complexity of environment and the intelligence of the individual, a problem which is beyond the scope of this article.

WHAT ARE THE INSTITUTIONS FOR CHILDREN DOING TO
PREVENT THEIR MENTAL DEFECTIVES FROM
BECOMING DELINQUENT?

SUSAN W. HOAGLAND.

Chairman, Mental Hygiene Committee, Women's City Club of New York

In May, 1917, the Mental Hygiene Committee of the New York Women's City Club, which includes among its members many probation officers, and workers in progressive correctional institutions, sought to discover some means of checking, at its source, the apparently never ending stream of mentally defective delinquents appearing before our courts.

One signpost seemed to lead toward the child-caring institutions, which might not be discovering or properly training their defective children, or securing for them suitable after-care on discharge.

In pursuance of this idea, the following questionnaire was sent to 183 child-caring institutions in New York State, selected from the New York Charities Directory and the latest annual report of the State Board of Charities; of these, ninety, or 57 per cent, answered with great courtesy, and showed much interest in the result of the investigation.

QUESTIONNAIRE.

1. Are mental examinations or psychological tests given to the children in your institution?
2. What tests, if any, are given?
3. Are they given to every child?
4. Are they given only to children suspected of mental defect?
5. When is the examination given?
6. What percentage of the children under your care do you believe to be mentally deficient?
7. Do you retain in your institution children definitely diagnosed as feeble-minded?
8. Do these children receive special care or training?
9. Do you feel that the presence of these children in your institution is detrimental to the normal children?

10. What percentage of children so definitely diagnosed are you able to transfer to state institutions?

11. What action do you feel is most urgently needed, throughout the state, in order to bring about proper provision for the feeble-minded who come under your care?

12. If a feeble-minded child leaves your institution in the usual course of events, is any agency notified as to the child's mental condition, and asked to supervise it?

Of the 90 institutions which answered, 18 gave complete Binet tests. 13 gave Binet tests "when necessary." 4 gave "complete tests by the institution physician." 14 gave no tests at all. The remaining institutions, 49 in number, gave tests of some sort, a few confusing mental tests with tests in mental arithmetic.

The 14 institutions giving no tests, in some cases, did not make that definite statement; but wrote that they "took no feeble-minded children," or that to their knowledge, they "had no subnormal children." Four or five institutions were connected with New York hospitals, taking only children sent by these hospitals, which were presumed to have examined the children before sending them.

"When is the examination given?" was answered in all cases by "before or on entrance," and many added "as many times afterward as is deemed necessary."

"What percentage of the children under your care do you believe to be mentally defective?"

Here the replies were usually 1 per cent, 2 per cent, and 5 per cent, but in some cases the percentages were remarkably high. The inspector of the State Board of Charities found but three normal children out of the fifty at the Susquehanna Valley Home. The Buffalo Orphan Asylum reports 20 per cent defective children, who are boarded in private homes, for lack of state institutions. Saint Germaine's Home finds 12 to 20 per cent of its girls defective. Dr. Wright of the State Agricultural and Industrial Home finds 15 to 20 per cent of his charges are subnormal, and the Orange County agent writes from Goshen, N. Y., that two-thirds of his charges, if not mental defectives, are mentally retarded.

"Do these children receive special care or training?"

Generally the answer was "yes." They were in special classes, with the emphasis laid on manual training; but in many cases the answer was "No, we have no funds. All we can do is to keep them clean and comfortable, and keep the other children from imposing on them."

"Do you feel that the presence of these children is detrimental to the welfare of the normal children?"

The answer was almost unanimously "Yes." The only intelligent exception was that of the head of the Bease Memorial Farm, who wrote "I do not feel that the presence of these children is detrimental to the welfare of the normal children. The feeble-minded children who have been under my care have been extremely amiable. I have watched them all closely, and in not a single case have I been able to learn anything in their actions that would be detrimental to the welfare of the other children."

"What percentage of the children definitely diagnosed as feeble-minded, are you able to transfer to state institutions?"

In the replies to this question the inadequacy of our institutional capacity is scored. The answers read: "We have been able to transfer only one in two years." "We are obliged to keep them because the custodial institutions are so overcrowded." "We board them in private families for lack of custodial institutions." "We can transfer very few, almost none." "We can transfer two in four years" or "one in three and a half years." A few of the New York City institutions said they were able to transfer at once.

"What action do you think is most urgently needed to bring about proper provision for the feeble-minded?"

The popular answer to this question was "Enlarge the work done at Letchworth." Some wrote "Larger appropriations," "Propaganda," "Better classification," "Segregation," and "More intelligent intensive training."

There are two requests for institutions taking borderline cases, or children not quite normal. The Central New York Institution for Deaf Mutes writes "There is great need of special facilities for the care of mentally defective deaf children. We are the only school

in the state dealing with the problem." The superintendent of the Troy Orphan Asylum says that better provision for the feeble-minded is the crying need of the minute.

"If a feeble-minded child leaves your institution is any one notified as to the child's mental condition, and asked to supervise it?"

The answers to this question showed that heads of many of the institutions were being roused by it to new duties. They wrote "We are planning to notify," or "In future we will supervise." But the Albany Orphans' Home writes "There is no agency for us to notify;" and the Troy Orphan Asylum says "No, whom should we notify?" The Syracuse State Institution for the Feeble-minded notifies the State Probation Commission, and several Catholic institutions state that after-care is given by their field-workers.

The information thus secured reveals the fact that a constant stream of mentally defective children is coming out of our institutions for children in New York state without proper training or suitable and sufficient after-care. Many of these children because of their suggestibility, are potential delinquents. For their own sakes, for the sake of the taxpayers, for the sake of all workers in courts and correctional institutions, this stream should be very seriously considered, and something done to cope with it before it reaches the courts. These children should be protected from becoming delinquents, as they might be.

A copy of the results of this investigation was sent to each institution answering the questions, and also a pamphlet entitled "Outlines of a State Policy for Dealing With Mental Deficiency" published by the New York Psychiatric Society, and distributed by the National Committee for Mental Hygiene.

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Vol. III

MARCH, 1918

No. 2

REVIEWS

U. S. COMMISSIONER OF EDUCATION. Report for the year ended June 30, 1917. 2 Vols. pp. 1-102, 1-692. Washington, D. C., 1917. The following items extracted from the report are of especial interest to students of delinquency:

Emphasis is placed upon the desirability of placing all institutions for the delinquent, dependent and defective classes under the supervision of the state educational authorities. Recommendations following the surveys of Wyoming (Vol. 1, p. 3) and Colorado (p. 35) suggest that these institutions are in reality schools for special education, and should be so considered and provided for.

In discussing the effect of the war on educational conditions in foreign countries, mention is made (p. 81) of the adoption of war orphans by certain schools in France who provide these unfortunate children with food, shelter, and clothing until they become self-supporting. Compulsory attendance is enforced by a system of fines. Germany, probably more than any other nation, has felt the effect of war conditions on juvenile misconduct. (p. 86) "Owing to the lack of proper surveillance, as well as to certain psychological causes, school children in Germany have become, during the war, unusually mischievous and unruly." In Berlin the school authorities have adopted the following resolution:

"In view of the fact that numerous cases, mentioned at this meeting, have proved that the behavior of school children is becoming increasingly bad, we request that orders shall be given (1) for the police and the guardians of order and the law to take energetic measures on their own initiative against all shamelessness, mischief, and roughness on the part of children in the streets; (2) to prevent any restriction of the lawful right of punishment which belongs to the teacher; (3) that the educative influence of the school may make itself evident in their behavior to older persons who have the courage to take action against the insubordination which is exhibited by the young every day in the houses, court yards, and streets of our city; and (4) to see that the school police intervene much more speedily and energetically."

Among the recommendations of Commissioner Claxton for increasing the activities and efficiency of the Bureau is (p. 94) "the establishment of a division, with specialists and assistants, for the investigation of the education of exceptional children." It is noted that there are more than 2,000,000 children in the United States "whose education requires means varying widely from those in common use for the education of normal children." It should be the duty of the Bureau to give "accurate information and helpful advice" in regard to problems of special education.

The necessity is noted (p. 95) for an investigation of the possibilities of education of children in their homes, and of the cooperation of home and school toward the betterment of physical, mental and moral status. "The home is the primary and fundamental educational institution . . . If education in the home fails, no other agency can make good the failure."

Most readers of the Journal will readily agree that further extension of the work of the Bureau into the field of special education is highly desirable.

Chapter XII of Vol. II is devoted to statistics of state industrial schools. In 1916 there were 121 schools reporting, as against 80 in 1900, and 115 in 1910. The number of inmates of these schools has increased from 23,901 in 1900 to 61,828 in 1916. The total expenditures of institutions reporting for the year were \$9,585,047.

J. H. W.

LICKLEY, Ernest J.: *Causes of Truancy Among Boys*. Sociological Monographs No. 3, Southern California Sociological Society. Los Angeles, November, 1917. University of Southern California Press, pp. 12. This monograph is based on a study of 1554 truants that have been dealt with during the past eleven years by the Department of Compulsory Education and Child Welfare, Los Angeles City Schools, of which Mr. Lickley is director. Follow-up records are kept until the boys reach the age of eighteen years. 73.4 per cent were reported as doing well; 19.4 per cent unknown; 7.0 per cent not doing well; 1.0 per cent deceased.

"Truancy is usually traceable to certain inherent peculiarities which may be called subjective factors, or to certain environmental conditions in the school, home, or neighborhood, which may be called objective or casual factors." The 1554 cases may be sub-divided into the various immediate causes which come under each of these two general divisions. I. Causes which are inherent in the pupil: violent temper or quarrelsome disposition, 192 cases; propensities for fighting, 110; desire for natural or kindred companionship, 87; likes and dislikes of the pupil, 59; physical defectiveness, 61; other results of heredity—nomadic tendency, 11 and mental defectiveness, 49; natural commercial tendencies, 38; animal love for play, 41; venture-some disposition—love of gambling—allurement of risk, 18. II. Conditions external to the pupil have been classified in relation to home, school, and neighborhood. Under home conditions we have (A) broken homes—(1) divorce or separation, 242 cases; (2) death or desertion of parents, 28; (B) parents—(1) negligent parents, 69; (2) ignorant parents, 38; (3) mercenary parents, 21; (4) immoral parents, 9; (C) poverty, 33. Under school conditions we have the following immediate causes: insufficient individual attention, 196 cases; inability of teacher to forgive past offenses, 44; inelastic courses of study, 35; unfair markings, 37; inadequate playgrounds, 17; religious holidays, 13; excessive repression, 8. Under neighborhood conditions we have the following causes: street trades, 36 cases; local gangs, 35; commercialized amusements, 27.

Summarization of these data show that, of the 1554 cases of truancy, 666 (or 42.8 per cent) were found to fall directly under the

heading of subjective causes, while 888 (or 57.1 per cent) were due chiefly to factors in the environment. Of the environmental cases, 440 (or 49.5 per cent) are charged to subnormal home conditions, 350 (or 39.4 per cent) are found in inadequate school provisions, and 98 (or 11.0 per cent) are attributed to neighborhood responsibility. Only a small percentage of the entire number is to be classed as wilful cases of truancy.

This study is particularly valuable as it shows that the causes of truancy among boys are manifold, with complex interrelations of both subjective and objective factors. It seems that the analysis is of more value in the sense that it emphasizes the many conditions which may have some causal relation in the individual case rather than that one particular cause may be found for each of the 1554 cases. A study of the personal and family history of truants committed to Whittier State School indicates that in a given case there may be a combination of factors. For example, a boy with a "violent temper or quarrelsome disposition" may show "mental defectiveness," may have lived in a "broken home," and may have run with a "local gang;" each of these conditions might have some influence, and it is hardly correct to eliminate all except one which appears most obvious.

Binet-Simon intelligence tests were given to 122 unselected special school boys. It was found that 8.2 per cent of these cases were feeble-minded. It is interesting to compare this result with that of tests given to unselected children in the public schools. Dr. Terman¹ states that "wherever intelligence tests have been made in any considerable number in the schools, they have shown that not far from 2 per cent. of the children enrolled have a grade of intelligence which . . . will never develop beyond the level which is normal for the child of 11 or 12 years of age." Dr. Goddard² reports that a study of mentally defective children in New York City indicates that "2 per cent of the school population is an underestimate of the number of mental defectives in any community." One of the most

1. Terman, Lewis M. *The Measurement of Intelligence*, p. 6.

2. Goddard, Henry H. *School Training of Defective Children*, p. ix.

recent surveys of exceptional children³ concludes that "the proportion of feeble-minded children in the Santa Ana (California) schools is between 1 and 2 per cent of the school enrollment. The greater figure is probably nearer the truth. Thus it appears that there is about four times as much feeble-mindedness among special school boys as among regular school pupils.

WILLIS W. CLARK.

NEW YORK. State Board of Charities. Bureau of Analysis and Investigation. Field Work Manual. Eugenics and Social Welfare Bulletin No. X. 1917. pp. 187. This Field Work Manual was written with the object of placing the aim and methods of field-work as shown by the experience of The Bureau of Analysis and Investigation, New York State Board of Charities, before persons in institutions or private organizations who may wish to undertake field work, and of providing a manual for investigators who may be placed on the staff of the State Board of Charities. About fifty pages are devoted directly to the subject of field-work, twenty-two pages to a sample case history, and the remaining hundred odd pages to quotations from leading authorities and summaries of leading opinion on the characteristics, traits, and physical conditions that a field-worker will be called upon to observe. Field-work is "a form of social research which has developed in connection with the study of the environment and heredity of feeble-mindedness, epilepsy, criminality, and insanity."

Many valuable suggestions are given for evaluating the mentality of individuals to whom it is not possible to give mental tests, and for furnishing supplementary data, for the causes which have been examined, chapters on neurotic symptoms, epilepsy, and insanity give a summary of the best thought on these subjects. Criminality, alcoholism, syphilis, sex offense, wanderlust, and pauperism are dealt with very briefly. Several pages are given to a discussion of the functions and possible effects of the ductless glands. Attention is given

3. Exceptional Children in the Schools of Santa Ana, California. A Survey by the Research Staff of Whittier State School. Reported by J. Harold Williams. Whittier State School, Department of Research, Bulletin No. 6, p. 27.

to physical stigmata and to the organs of the head and their functions. Other conditions described are headache and migraine, rheumatism, cancer, rickets, bedsores, and hernia. Seven pages are given to a discussion of birth and early development of the child. All of this information is valuable for a field-worker or any person who has to investigate social conditions; however, more attention to methods of detecting some of the traits described would have been of value.

A chapter entitled "Instruction to Field-workers" suggests sources of information and methods of handling the data obtained. An extended questionnaire of traits which should be considered by the investigator is also given. The final chapters are School Records and Retardation, Social Reaction, Economic Status, and Summary and Analysis of Field Work.

The manual outlines the general purposes of field-work, but as it is considered that the "primary theme for investigation in field-work is heredity," it is of particular value to those who are investigating mental traits and hereditary defects. Although it states "it seems at the present time environment is a very considerable factor in delinquency and criminality, if not in other matters of defect," very little attention is given to the study of environmental conditions. Particularly in the study of delinquency and criminality, items such as moral character, conduct, vocational record, associates, amusements, and home and neighborhood conditions, should be given careful consideration.

The Field Work Manual is a valuable contribution to social research literature and should be given careful study by social investigators.

WILLIS W. CLARK.

CORRECTION.

In Dr. Wallin's article in the last issue, Vol. III, No. 1, January, 1918, on page 23, line 7, the word "tested" should read "standardized." On page 16, line 22, the first word, "points," should have been omitted.

BOOKS RECEIVED

Athearn, Walter Scott: Religious Education and American Democracy. The Pilgrim Press, Boston, Mass. 1917. pp. 394. Price \$1.50.

Anderson, Meta L.: Education of Defectives in the Public Schools. World Book Company, Yonkers, New York. 1917. pp. 104. Price 75 cents.

Flexner, Abraham, and Bachman, Frank P.: Public Education in Maryland. The General Education Board, New York. 1916. pp. 230.

Gregg, F. M.: Hygiene as Nature Study. Published by the author, Peru, Nebraska. 1917. pp. 170. Price 70 cents.

Reed, Anna Y.: Newsboy Service. World Book Company, Yonkers, New York. 1917. pp. 175. Price 90 cents.

Richmond, Mary E.: Social Diagnosis. Russell Sage Foundation, New York. 1917. pp. 511. Price \$2.00.

Stevenson, B. L.: Socio-Anthropometry. Richard G. Badger, Boston. 1916. pp. 153. Price \$1.00.

Wallin, J. E. Wallace: Problems of Subnormality. World Book Company, Yonkers, New York. 1917. pp. 485. Price \$3.00.

 PERIODICAL LITERATURE

HERRMAN, CHARLES: HEREDITY AND DISEASE. Favorable and unfavorable qualities or characteristics are subject to the same laws of inheritance. It is generally recognized that anthropological peculiarities are inherited, but the fact that the same laws govern pathological and psychical anomalies is almost completely ignored. In the etiology of disease, physicians recognize two factors: the character and virulence of the infectious material, and the susceptibility or resistance of the individual infected. As a rule the importance of the former has been overestimated, and that of the latter has been underestimated. Every physician can cite marked examples of family predisposition to certain diseases, or of vulnerability of a certain organ. Little attention has been given to heredity as a possible factor in the causation of disease for several reasons. Family histories and pedigrees are often inaccurate or incomplete; there is often a desire to conceal unfavorable qualities or tendencies on the part of the family in question; the children who present

the anomaly are frequently among the miscarriages, still-births, or those dying in early infancy, and may be easily overlooked. Much light could be thrown on many of the obscure problems of etiology if a large number of complete pedigrees of families having those diseases and conditions which are known to be frequently inherited were collected.—*The Journal of Heredity*, IX-2. Feb., 1918. pp. 77-80. W. W. C.

INDIANA COMMISSION ON MENTAL DEFECTIVES: RECOMMENDATIONS. The Commission appointed by the governor in 1916 reports as follows: (1) More than 1,000 persons lack proper treatment because of insufficient accommodations in state hospitals; (2) recommends new buildings on grounds of present hospital, or if possible farm colonies; (3) recommends increasing capacity of Indiana village for epileptics from 305 to 1,200, especially increasing accommodations for women; (4) recommends that all general hospitals provide wards for observation and detention pending commitment; (5) recommends that no cases be placed in jail; (6) recommends law authorizing voluntary commitments; (7) recommends amending commitment law for the feeble-minded so as to allow of admission of feeble-minded male adults as is now provided for feeble-minded women; (8) recommends enlarging the school colony for feeble-minded at Fort Wayne by establishing a colony in the southern part of the state on a site of not less than a thousand acres; (9) recommends separate classes for mentally retarded children; (10) recommends mental examinations for all school children.—*Mental Hygiene*, I-3, July, 1917. p. 491. J. H. W.

JOHNSON, CHARLES H.: THE NEXT IMPORTANT STEP IN THE FIELD OF PHILANTHROPY. The next great step in the field of charity and correction should be co-operation of all the social agencies of the community for the purpose of providing a method of social sanitation. Misfortunes such as blindness, insanity, plagues, fevers, and high infant mortality rates are no longer considered as divine visitations, but largely due to defective social conditions. Studies of dependents indicate that poverty is not a necessary evil, but a result of preventable conditions. Most work in the field of crime and delinquency has been remedial and not preventive. Before united action can be taken, thorough social and psychological investigations will have to be made. Every criminal court and institution should be a laboratory on the subject of crime. Studies which have been made indicate that the majority of offenses against the law, like the majority of diseases, are of a preventable nature. To provide for social sanitation, a social consciousness must be developed which will recognize the interdependence of all the members of the city and community. A social conscience, which means a development in each individual of his responsibility for his city, his town, and his neighborhood, is needed. Then social activity or the exercise of the social will must be brought about. This activity must be unified, educational, and social and based on individual treatment. Any decrease in

crime today is due to better social and industrial conditions and more efficient individual instruction. If we are to have fewer prisons and prisoners, we must adopt a system of moral and social sanitation which will cut off the supply.—*The National Humane Review*, V-12, VI-1. December, 1917; January, 1918. pp. 226, 227, 6, 7, 18. W. W. C.

LYONS, RABBI ALEXANDER: UNGRADED PARENTS. We should not describe the ungraded child in misleading terms in the interest of an unwarranted delicacy. The ungraded child, generally speaking, can never live wholly; he is a grief to his parents and an obstacle to other children; he is a social encumbrance present and prospective. We should do whatever we can for him, but we should not stop there. A predominant part of juvenile mental deficiency may be attributed to heredity and some portions to careless handling of the plastic material of infancy. The parents are ignorantly or unconsciously, carelessly or wilfully, the murderers of these children. They are the ungraded. Ungraded parents should be anticipated and prevented by propaganda in behalf of a more inclusive and stringent restriction of marriage. There should be a powerful insistence, through education and legislation, upon the seriousness of marriage and upon the cautions requisite with regard to factors affecting the possible outcome of marriage. Parenthood should be presented as a sublime immolation upon the altar of social service. "Let us treat the ungraded child as we already have, but try even harder to anticipate and prevent the ungraded parent we should not have."—*Education*, XXXVIII-4. Dec., 1917, pp. 338-340. W. W. C.

SOLOMON, HARRY C., and SOLOMON, MAIDA H.: THE FAMILY OF THE NEUROSYPHILITIC. Although it is generally recognized that syphilis is a contagious disease and that it is frequently transmitted by the infected person to the spouse and to the children, the problem is largely neglected. Some of the most frequent and most serious of the syphilitic conditions are cardio-vascular disease and diseases of the nervous system, such as general paresis, locomotor ataxia, and cerebrospinal syphilis. General paresis and locomotor ataxia are always and without exception syphilitic manifestations. At the Boston Psychopathic Hospital it is the practice to examine whenever possible the families of all syphilitic patients. A study of the families of 247 syphilitics indicated that only 69, or 28 per cent, showed no defect as to children. Only 61 families, or 25 per cent, showed neither defective children nor Wassermann reactions. Much of the syphilitic damage is represented by abortions, miscarriages, still-births, and early deaths. No greater cause for race suicide can be imagined than this disease. The average number of living children in a syphilitic family is 1.3, as compared with the U. S. Census report of an average birth rate of 4.4 children per family. Of these 1.3 living children per family, many are afflicted with syphilis and will have a shortened life and lessened efficiency. It is important that diagnosis of syphilis be made early so that therapy may be applied before the ravages have gone very far. In any event, results of therapy in syphilis and especially in late and congenital syphilis can be attained only after years of treatment, and the patients must be under care probably for life.—*Mental Hygiene*, II-1. Jan., 1918, pp. 71-80. W. W. C.

WALLACE, GEORGE N.: THE TYPE OF FEEBLE-MINDED WHO CAN BE CARED FOR IN THE COMMUNITY. Although there are many cases of feeble-mindedness that require institutional care, it is neither necessary nor desirable to segregate all cases, even if it were practicable financially. As there are and always will be large numbers of feeble-minded in the community, we should make more liberal provision for their care and have a better understanding of the difficulties they encounter in the community. Most communities have certain conditions that make them unsafe for any unsupervised feeble-minded person. He does not have good judgment, cannot properly adjust himself to his environment, and, without special training, cannot learn to perform the ordinary duties that the normal person naturally picks up. It is impossible to say that any feeble-minded person will do well in a community, as his reactions will depend on the influence to which he is subjected, and the only safe prediction that can be made for his welfare must be based upon knowledge that he will receive proper supervision. Special classes, with specially adapted teachers, under a trained supervisor, and under medical supervision, make an excellent organization for caring for the defective children in a community. Every school system of any size should have a sufficient number of special classes to accommodate all children with mental defect. With this extension of the movement it is probable that the majority of children with ordinary mental defect could be safely protected and educated, and have the added advantages of home care. With the advent of mature life, more difficult problems in dealing with the feeble-minded arise. The number of feeble-minded that can be cared for in the community is in direct ratio to the supervision the community is willing to provide. Many of the social problems of the feeble-minded could be prevented by continuing a kindly oversight after they have left the supervision of the special classes. A permanent registry of all feeble-minded and a corps of trained workers, who have worked with and understand these cases, would provide supervision that would insure against their becoming harmful agents in the community.—Ungraded, II-5, Feb., 1917. pp. 105-109. W. W. C.

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CHILD LABOR AND JUVENILE DELINQUENCY.

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Until comparatively recent years child labor has not been seriously considered in connection with juvenile delinquency, but the findings of recent investigations make it increasingly clear that juvenile delinquency is one of the heaviest penalties and one of the most important problems that we have to consider in connection with the entrance of young children into industry, trade, and agriculture. Especially at this time, when war is sapping the strongest of the manhood of all countries engaged, we should look with particular care to the preservation of civilian strength, and the preparation of young children to take their place in a world of disorganization and unrest. It was with no small dismay, therefore, that England faced the fact that between December 1915 and February 1916, an investigation conducted in seventeen of the largest cities showed an increase of 34 per cent in the number of children charged with punishable offenses, as compared with the same three months the year before. Cecil Leeson reported that, "Juvenile lawlessness has spread through the country like a plague." Manchester showed an increase of 56 per cent in offenses generally, Edinburgh 47 per cent, and Liverpool an increase of 32 per cent. Mr. Leeson believes that the estimate of a 34 per cent increase throughout the country is a very conservative one. He shows that the heaviest toll came in the darkest months of the year, and that the scarcity of policemen may have had much to do with the fact that the figures were not higher because they were unable to catch and bring into court by any means the full number of offenders. Of 400 juvenile offenders two out of every five had fathers in the army or the navy. "Of the five million men now withdrawn from home life, it may be inferred that, married or single, the great majority of them had influence over the conduct of children in one

capacity or the other. The mother is deprived of the power to enforce her authority, and the boys have found it out." Many women have left their home work to do factory work, others have moved to a cheaper locality. There has been a general breaking up of the home atmosphere, and the school life as well has been conducted under difficulties, for many teachers have enlisted, the schools have been put on half time, the truancy regulations have been unenforced, and so on. Such are some of the causes that seem to be responsible in part for the startling growth in juvenile delinquency.

As another principal reason, Mr. Leeson cited the following: "The present abnormal demand for boy labor, and the connivance at its satisfaction by local authorities, has much to answer for in increasing juvenile delinquency, particularly where boys of 12 and 13 are released from school for work; and we have it on the authority of Sir James Yoxall, M. P., that from 150,000 to 200,000 children between the ages of 11 and 13 have been so released. It cannot be mere coincidence that delinquency among lads of 12 and 13 has increased in greater proportion than it has among lads in the other age groups." The high wages that young boys are now receiving, combined with the absence of adult direction as to their disposal, is a strong incentive toward high-spiritedness to say the least. The boys are receiving the wages and the treatment of men, without having the experience to steady them. A realization of their industrial value makes many of them less willing to tolerate discipline. The influence with which they come in contact in the shops is not such as to create very good results upon their faculties of imitation and admiration. "When as now, children of 12 are subjected to it, and their elders are too busy to afford them guidance, it may be expected that the lad will apply to his leisure the standard of conduct he is induced to adopt at his work." "Had we set out with the deliberate intention," Mr. Leeson adds, "of manufacturing juvenile delinquents, could we have done so in any more certain way? Childhood is a time of many adjustments—adjustments of a delicate mechanism to an increasingly complicated society. Even for adults, the world of the moment is a harder place to do well in than it was two years ago; it is not likely to be less hard for inexperienced children from whom guidance is withheld."

It is not only in England that the connection between increased juvenile employment and increased delinquency is apparent. In Montreal the increase in delinquency during three years of war was 41 per cent. We know that in Berlin in 1915 there were twice as many crimes committed by children as in 1914, and that the increase in juvenile employment is at least correspondent. It is reported for instance that 8,000 children between 14 and 16 are working in Prussian mines. In France, Russia, and Hungary, children are working in the fields, and presumably in the factories as well, to a far greater extent than ever before. It is conceivable that America will fare no better than England and Germany if she allows young children to enter industry as an emergency, and a so-called "patriotic" measure. Just what the consequences will be it is impossible to foretell. It is only from an examination of the effects of employment upon delinquency in the near past that any prediction can be made.

The Federal report of 1911 on Juvenile Delinquency and Its Relation to Employment established very clearly the relation between employment and crime. The total number of delinquents whose records were studied was 4,839, of whom 2,767 had at some time been employed and 2,072 had never been employed. For a considerable number of these children the records showed more than a single offense. The entire number of offenses recorded was 8,797, the working children being responsible for 5,471, and the non-working children for 3,326 offenses. The ages ranged from 6 to 16 years. It must be remembered in comparing these figures that a majority—presumably a large majority—of all the children between these ages are not working. The preponderance of 62.2 per cent of the offenses committed by the workers thereupon assumes impressive proportions over the 37.8 per cent for which non-working children were responsible. All the possible sources of influence were carefully considered. The family environment and home life were investigated, with the result that as between working and non-working girls the home conditions seemed to favor the workers. Among the boys, only one-fifth of the workers, as opposed to nearly one-third of the non-workers came from distinctly bad homes, while from fair and good homes the proportion was approximately 76 to 65 per cent. The excess of working de-

linquents could not be explained by reference to their home conditions. Even where the home conditions are favorable the working child, more often than the non-working, goes wrong. There seems to be something merely in the fact of their being at work that causes their delinquency.

It was sought, however, to establish a closer connection than mere circumstantial evidence between the children's work and their offense. Just what constitutes "connection" is a somewhat difficult matter to decide, but it was considered by the investigators that only when a working child commits an offense during working hours, in some place to which his work calls him, and against some person with whom his work brings him in contact can any connection be said to exist between the misdemeanor and the employment. When only two of the factors are present, no general statement can be made. The test is rigid, and it is certain that it excludes many cases where a connection really exists, but even at that, a direct connection was traced in the case of practically one-fourth of the boys employed at the time of their latest offense, and the number of boy delinquents in occupations which show more than five cases of delinquency chargeable to occupation was found to be 308. Of these, 100 were errand or delivery boys, 129 were newsboys, 16 were drivers or helpers, 13 were street vendors, and 10 were messengers. It will be readily seen that the street trades are the most dangerous for children from the point of view of moral influence. The fact that domestic service among the girls and newspaper selling among the boys furnish a large proportion of child delinquents cannot be too readily accepted as a sign of the greater danger inherent in these two occupations, until it is known how large a proportion of all working girls and boys are engaged in them. The general conclusion of the report is that, "The fact of being at work seems to constitute an abnormal situation which is in itself dangerous. The danger may be increased by the conditions of certain industries but cannot be wholly done away with even when the conditions are good."

Findings almost identical with these were obtained by the National Child Labor Committee in an investigation conducted in 1917 of child labor and juvenile delinquency in Manhattan. Miss Mabel Ellis,

in her report of the results of the investigation cites many interesting signs of increased employment in America. In Washington, for example, the public schools, knowing that war activities would make a great increase in the city's population and that many men would bring their families with them, prepared to care for a greatly increased enrollment. But although 78,000 were prepared for, only 46,000 came. Yet the "kindergartens were over-run." The reason for this situation given by the school authorities was that boys and girls were earning from \$12.50 to \$25.00 a week in government work or private offices. The principal of one of the boys' high schools in New York City says that the wages offered for part-time work are now equal to those formerly paid for full-time employment, and that he is unable to fill the demand for boys to give part-time service. In every state, as is well known, the regulations governing child labor and school attendance have been relaxed or ignored in the rush of young children into agriculture—a rush that was not wholly appreciated by the farmers, who as a rule do not care for children under 16, except their own. "How would manufacturers like to have green hands come into their shops for a few days?" asked one farmer in reply to a questionnaire sent by the National Child Labor Committee to grange officers. "The same question can be applied to the farmer in trying to work school children who would simply be under foot." It is impossible to obtain statistics for the increase in child employment throughout the country since the beginning of war; in many places records simply were not kept by the school authorities. In other places the records show a tremendous increase, as in Trenton, N. J., where the number of work permits for 1917 were double the record for 1916. It is therefore time that the matter should be considered in its more serious aspects.

In the decade that has elapsed since the earlier investigation, many improvements have been brought about in the administration of child labor and compulsory education laws; age and grade requirements have been raised; the forces of inspectors and attendance officers have been increased; vocational guidance has become a part of the school organization. A better system of record-keeping has been initiated in the juvenile courts, and an improvement has been

made in the numbers and in the training of probation officers. The data available in 1917 were much greater in amount than in 1906 which was the year that supplied the records for the Federal report. Miss Ellis' study was based upon the stories of 1,792 children who passed through the Manhattan Branch of the Children's Court in 1916. The purpose of the investigation was to learn to what extent these children had been gainfully employed, which occupations they had followed, what had been the home conditions, the ages, schooling, nativity, color, and other factors that might conceivably have bearing upon their delinquency.

The terms used in connection with the study need some definition. The phrase "juvenile delinquency" varies, technically, in the different states, both in regard to age limit, and the offenses the commission of which makes a child known as delinquent. In the State of New York a juvenile delinquent is defined as "a child over 7 and under 16 who shall commit any act or omission which if committed by an adult would be a crime not punishable by death or life imprisonment." With the exception of murder, therefore, the Children's Court is given jurisdiction over children arrested for any offense whatever. Truancy cases are brought into court only when the parent refuses his consent to the commitment of difficult cases to one of the three truant schools maintained by the city. This explains the small number of truancy cases reported for the year 1916 in Manhattan. The large group of children classed as "ungovernable," or "disorderly" are not called "juvenile delinquents," but are tried under Sec. 486 of the Penal Law. In general, Section 486 "may be said to cover those juvenile maladjustments where weakness in parental control or poverty is considered the main factor, but obviously some of the situations covered by these paragraphs may involve a considerable degree of conscious delinquency on the part of the child. Since the purpose of our investigation was to study only those children who were delinquent, we have discarded all cases of true improper guardianship, and all cases where the probation officer's record clearly showed the child as the victim rather than the aggressor in the offense charged against him."

"A striking sample of the latter sort is the story of John ——. This boy of 13 had been for 12 years in a children's institution near New York City. His mother finally became able to support him and he came back to live with her. On the first Sunday after his return to the city, he went alone to church, lost his way coming home, and was picked up by a policeman who promptly arrested him as a 'disorderly child; deserted his home'".

On the other hand, the study includes certain children who, though charged only with improper guardianship, had showed in fact true delinquency. Mentally defective children were excluded whose condition was obvious and required immediate commitment to an institution; all cases where the child was acquitted or discharged were also excluded. **Juvenile**, then, means for the purpose of this study, a child over 7 and under 16, and **delinquent** one who has been convicted of some real offense against state law or city ordinance."

The term "working child" was found to be more difficult of definition. There is the child who has left school to take out working papers; whether he is employed at the time of arrest or not, he is certainly a working child, whether his period of employment has been long or short. But there is another sort of child who has regular employment before and after school; and still another who helps his father in the grocery store; and there is a little girl who earns 10 cents an hour before and after school minding the neighbor's baby. And there are boys who run errands "once in a while" for some near-by shop. It proved impossible to lay down hard and fast rules for the classification of such children. Each case was passed upon individually. Occasionally two children whose stories appeared to place them in the same class on the probation records, were judged differently because of corroborative evidence present in one case and lacking in the other.

"Two little Italians, for instance, aged eight and nine, both say that they have 'shined shoes.' One was arrested with his kit on his very first expedition to the City Hall Park, the technical charge being—Violation of Corporation Ordinance; shining shoes. The second was arrested for larceny and in the course of his first interview with the probation officer, it developed that he once borrowed his older brother's kit and sallied forth to make his fortune. 'But nobody came by me, so I stopped.' The officer warned him against a repetition of the attempt and there is no evidence during the entire probation

period that the boy failed to obey instructions. We would consider the first a 'working boy' since there is no reason to believe his industrial experience would have terminated so abruptly had it not been for his arrest. The second we would class as a non-worker since a single isolated experience is not ordinarily considered to be 'employment.'"

The study, that is, is concerned only with those children who had been gainfully employed before their arrest, all who had obtained a work permit and had left school in order to look for work, together with a few cases where children were employed without pay by their parents in regular work, where the conditions of their employment were directly connected with their delinquency. The following list gives the number of cases excluded with the reasons therefor:

Duplication	367
Classification doubtful.....	58
Arraigned before 1916.....	49
True Improper Guardianship.....	46
Over Sixteen	9
Acquitted	13
Discharged	46
No Delinquency	12
Mental Defective Commitments.....	4
Record Incomplete	14
Cases transferred to another court, etc.....	2
	<hr/>
	621

There remains a total of 1,792 cases upon which the investigation was based. Of these, 164 were girls, and 1,628 were boys. 682 had been employed prior to their arrest, and 1,110 had never been employed. Table I shows the proportion of workers and non-workers, classified by sex:

TABLE I. NUMBER AND PERCENTAGE OF CHILDREN EMPLOYED AND NEVER EMPLOYED PRIOR TO ARREST ADJUDGED DELINQUENT BY MANHATTAN BRANCH OF CHILDREN'S COURT DURING 1916 CLASSIFIED BY SEX.

Sex	Number			Per Cent.		
	Working	Non-W.	Total	Working	Non-W.	Total
Boys	614	1,014	1,628	37.68	62.32	100.00
Girls	68	96	164	41.47	58.53	100.00
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	682	1,110	1,792	38.03	61.97	100.00

These figures would seem upon first sight to place the burden of offense upon the non-working children. But before drawing a too hasty conclusion we should remember the proportion of workers to non-workers in the entire city. The figures are a little difficult to cite accurately; but since the number of children enrolled in the elementary schools of the City in September 1914 was 724,833 and the number of children who secured permission to work during the same period totalled 39,635, or slightly over 5 per cent of the school registration, the number of non-workers would appear to be in general greatly in excess of the number of children employed. In Manhattan itself, to which the investigation was restricted, the number of children working with permits, or illegally, was found to be somewhat over 8 per cent of the public elementary school enrollment. The rough basis of comparison makes it only fair to say that probably not more than 10 per cent of the children between 7 and 16 living in Manhattan were employed during 1916. But even on this basis, the working children contribute four times their share to the ranks of juvenile delinquency. Double the estimate, even, and the working children still would send twice their due proportion to court.

Of equal significance and interest are the facts brought out by an examination of the kinds of offenses with which working and non-working children are charged. It is of course always necessary to differentiate between the serious offenses and those that can be put down simply to exuberance or perhaps perfectly natural and excusable desires. The little boy who takes a plunge in the City Hall Park fountain when he thinks the cop is looking the other way, or the one who steals a few potatoes from a convenient freight car after a day's fishing, are not, it is pointed out, embryo criminals. Neither is the child who was arrested for grand larceny for stealing some valuable jewelry from the apartment of a woman who had engaged him to run errands. The boy admitted taking the things, but said that he didn't mean to steal them, but wanted to play with them. He left other more valuable articles untouched, and it was quite evident that he had no idea of their value. Such misdemeanors must be differentiated from the more serious ones where a boy plans and executes a gang robbery, or makes an attack upon another child with intent

to kill. There must also be a somewhat different classification from the one generally used by officers. In making the classification for the study the technical charge has been disregarded, and the child put in the group which had committed similar offenses. Thus the term **assault** is confined to the more serious affrays. The ordinary street fight is classed under **disorderly conduct**, together with a miscellaneous group which includes such offenses as meddling with telephone or trolley wires, trying to steal rides in the subway, selling transfers, throwing stones, etc. Cases of craps and gambling, drunkenness and theft were transferred from this convenient classification to their own groups. **Incorrigibility**, as used here, includes truants, runaways, children with work permits who refuse to work, and children who are generally unmanageable at home or at school. If theft, sex offenses, drunkenness, or violation of the child labor law was the outstanding feature in the original charge, the case was transferred to the proper group, but if these acts were coordinate with some other offenses, the child was left in the group of incorrigibles.

The term **sex offenses** when applied to a boy, indicates for the most part the less serious offenses into which he has been led by curiosity or by an adult. Only two instances were found where the charge involved a girl. With the girls, on the other hand, the term is applied only to extremely serious cases of immorality, or to those where unchastity has been established.

Violation of the child labor laws is a term applied to cases where the child has been arrested for peddling, selling papers without a badge or after legal hours; when the child has been actually employed, without a work permit, the employer is usually prosecuted. Only one serious offense is included under the term **having or discharging firearms**, and this was committed in defense of the boy's mother, and is therefore hardly to be called criminal. The boy woke late at night to see his drunken father threatening his mother with an axe. He seized his father's pistol and shot at him, without inflicting any serious injury. Table II shows the proportion and the character of the offenses thus classified.

It will be seen that begging and indulgence in games of chance seem to be almost exclusively offenses of the working children. In

10 of the 11 cases of begging, the offender was a newsboy or a street vendor who used his stock in trade as a cover. There is a more pronounced tendency to use firearms among the workers. If the unimportant charges are subtracted from this list, there is a total left of 911 boys arrested for the more serious offenses of arson, assault, drug selling, drunkenness, forgery, sex offenses, and theft. The working group were charged with 323 or approximately one-third of these offenses, and the non-workers with 588 or two-thirds. Remembering the proportion of working to non-working children for the entire group, we see that here, too, the working boys contribute at least twice and probably four times their share to the total. But among the girls, the working group leads both in absolute number and in proportion, charged as they are with 40 out of the 72 serious offenses.

TABLE II. NUMBER AND PER CENT OF WORKING AND NON-WORKING DELINQUENTS COMMITTING SPECIFIC OFFENSES CLASSIFIED BY SEX.

	BOYS				GIRLS			
	Number		Per Cent		Number		Per Cent	
	Work	N-Work	Work	N-Work	Work	N-Work	Work	N-Work
Arson	2	3	.32	.29	....	1	.....	1.78
Assault	36	54	5.86	5.32	....	....	.....	.....
Begging	11	5	1.79	.49	....	....	.....	.....
Craps and Gambling.....	17	2	2.76	.19	....	....	.....	.....
Disorderly Conduct	77	200	12.54	19.72	4	....	5.88	.....
Drug Sealing	3	1	.48	.09	....	....	.....	.....
Drunkenness	2	3	.32	.29	1	....	1.47	.....
Forgery	1	....	.16	....	2	....	2.94	.....
Incorrigibility	111	192	18.07	18.93	25	22	36.76	39.28
Sex Offenses	13	22	2.11	2.16	30	22	44.12	39.28
Suicide (Attempted)	1	....	.16	....	....	1	.....	1.78
Theft	266	505	43.32	49.80	5	10	7.35	17.85
Violation of Child								
Labor Law	48	....	7.81	....	1	....	1.47	.....
Weapon, having or								
discharging	26	27	4.23	2.66	....	....	.....	.....
Totals	614	1,014	100.00	100.00	68	56	100.00	100.00

In the right estimation of delinquency the offense itself is not so important as the past record of the offender. It was important, therefore, in studying the effect of employment upon delinquency to learn the proportion of recidivists among working and non-working

children. It is not the first offender who presents the serious problem, for he has often acted through thoughtlessness or high spirits. But the second offender has had a taste of the law and should know better. He shows evidences of the habit of transgression, and the superintendents of juvenile reformatories know that this habit, if once established, is broken with the utmost difficulty. How much more frequently the working boy is brought back to court than the children who remain in school is shown by the following figures: The percentage of recidivism among working boys was 43; among non-working boys it was 28. For the city as a whole the proportion of first offenders to recidivists was 73.8 as compared with 26.2. The percentage of recidivism for the Borough of Manhattan as calculated by the court was somewhat higher than for the city as a whole, 66.7 per cent of the boys being first offenders and 32.3 per cent recidivists. Whether it be for the city as a whole or for the group of Manhattan boys, the group of working boys studied was decidedly above the average rate of recidivism. The fact that girls are seldom found among the recidivists is due partly to the stronger feeling against bringing girls into court in the first place. Only 16 out of the 164 girls for whom records were obtained, made more than one appearance in court. From such a small number it is perhaps unfair to draw any general conclusion, but it is at all events interesting to know that the percentage of repeaters among the non-workers of the 16 cases was 12, while among the workers it was only 6.

The connection between the age factor and the kind of offense is shown often to be close. Theft, for instance, is the only offense among the serious charges that appears before the tenth year. A study of individual records shows, however, that the astonishingly large proportion of 8 and 9-year-old non-workers brought in on this charge is partly due to the frequency with which these children are used as cat's paw by older boys, sometimes, as the record relates "through full membership in such organizations as the 'Honest Club' the purpose of which to 'to steal,' but more often as temporary assistants useful because of their youth and apparent innocence. They 'lay chiggy,' or act as lookouts; they are pushed through narrow skylights; and they act as go-between for the older boys and the junk

dealers." The records of the non-workers display a steady increase in theft until the age of 14; at this age, the preponderance in theft shifts to the working group, together with the shift of many boys from school into industry.

Incorrigibility is proportionately highest among the workers at 13; at this age the arrests for violation of the child labor law are also highest. It seems to be probable that the desire to become a wage-earner and the consequent restlessness at school has much to do with the condition. Begging is almost entirely confined to boys under 14, for youth is an asset here, as well as in pilfering. Gambling and craps, on the other hand come later, when the boy has his own funds. About half the arrests on this count were among the 15-year-old workers. The 13-year-old non-workers lead in disorderly conduct; the 14-year-old group contributes the largest number of sex offenders, both absolute numbers and percentages being almost identical for both groups.

It is more difficult to determine the connection between the offenses and the comparative amount of schooling, because of the large number among the working boys, 169 or 27 per cent, for whom the school grade was not recorded. It is not safe to draw the conclusion that those boys who held work permits had not gone beyond the required 6th grade, in view of the fact that 28 per cent of the working boys whose grade is known had remained in school beyond the 6th grade, 67 having completed the 7th grade, 55 the 8th, 5 the 9th, and one the 10th grade. In contrast to these, is the small number of non-working children among the delinquents, who had gone beyond the 6th grade. Only 12 per cent of the 993 unemployed children whose grades are known had passed the point of possible entry into industry, while out of the whole group of delinquent children whose grades are known the percentage was 18. Another interesting point is that three per cent of the non-workers and 2 per cent of the workers were in ungraded classes—a fact which indicates that the mental conditions are apparently not more unfavorable among the workers than among the unemployed.

It was found, also, that in the matter of nationality the non-working group had slightly the advantage of the workers. 63 per

cent of the working group came from the non-English speaking immigrant population, against 59 per cent of the non-workers. It is suggested, however, that one must keep in mind the great difference in attitude toward the employment of young children which characterizes the American born and the English-speaking group in general, as opposed to the feeling of immigrants from Russia and Italy.

The popular idea of the working child is that he comes from a home where his help is necessary to the family income, or where, perhaps, the home has been broken up by the death of one or more parents. It is considered that there is often both moral and financial inducement for his back-sliding. No one is likely to dispute the fact that, other things being equal, a child is better off when home conditions are normal. Table III indicates the home conditions which contributed to the Children's Court population of 1916. The non-working children appear to have the advantage of the workers so far as the normal homes are concerned—which might be interpreted to mean that home conditions, rather than the mere fact of employment, were responsible for their delinquency.

But home conditions depend upon other elements than the mere presence of the father or mother in the home. They depend as much upon the housing, income, moral atmosphere, kind of neighborhood, employment or non-employment of the mother. These are things that figures cannot evaluate; personal opinion must to some extent be the criterion, and where there is personal opinion there may be of course be personal bias. But in the next table given in the report, individual bias was reduced to a minimum by the definite ascertainment of the facts as to the standard of living, the number of rooms, number of persons, with ages, who occupied them, rent, occupation of father and of other members of the family—whether skilled or unskilled, steady or seasonal—nationality, and facts as to present or former charitable relief. In addition to these facts, information was obtained from the probation officer, who generally had had several months' experience with the family, on the sanitation and cleanliness of the home, the moral reputation of home and neighborhood, and the situation with regard to the care of the children if the mother was employed.

TABLE III. PARENTAL CONDITION OF WORKING AND NON-WORKING DELINQUENT BOYS.

	No. Working	No. Non-W.	% Working	% Non-W.
<i>Father and Mother in Home:</i>				
Normal home	379	660	-----	-----
Father and step-mother	23	34	-----	-----
Mother and step-father	17	38	-----	-----
Total	419	732	68.24	72.18
<i>One Parent in Home:</i>				
Father dead	75	118	-----	-----
Mother dead	31	61	-----	-----
Deserted by father	20	17	-----	-----
Father not in U. S.	1	4	-----	-----
Parents sep. or divorced	18	34	-----	-----
Parent in institution	5	6	-----	-----
One dead, 1 deserted	8	3	-----	-----
One dead, 1 in institution.....	4	1	-----	-----
Total	162	244	26.39	24.06
<i>Neither Parent in Home:</i>				
Both dead	16	18	-----	-----
Both deserted	-----	3	-----	-----
Illegitimate or foundling	5	4	-----	-----
Total	21	25	3.42	2.46
Miscellaneous	5	7	.81	.70
Not Stated	7	6	1.14	.60
Grand Total	614	1014	100.00	100.00

"In general," the report states, "a home was considered **Good** when there was a fairly regular income sufficient to provide decent housing without serious overcrowding, when the mother was at home and when the moral influence of the home, so far as known to the probation officer, was good. Either distinctly bad moral influences or extreme poverty combined with a bad neighborhood, or with a working mother, were held to put a home in the **Poor** class. All other situations were classed as **Fair**."

Two homes were classed as **good** where the mother was employed away from home. In one, an Irish family, the father was dead and the mother worked as office cleaner early in the morning and late at night. Four children aged 9 to 15, were all regularly employed at a fair wage, except the 15-year-old delinquent who at the time of his arrest was out of work. The family occupied four rooms, neat and well furnished, in an undesirable neighborhood. The moral influences were excellent.

In the second family, Italian, the father was a barber, earning \$12.00 a week and the mother earned \$12.00 in a clothing factory. The father's shop was in the building where the family lived and he "kept an eye on the children" during the mother's absence. Their four room apartment was clean and well furnished. Of the five children, two boys, both eligible for work permits, were still in school, one of them in high school. The Charity Organization Society who once gave emergency relief while the man was out of work, considered the family "a very high type". There was every indication of intelligent and sympathetic co-operation with the probation officer.

Among the homes classed as poor in spite of good moral influences were such as these:

Mother insane and in institution; boy lived with father who was in advanced stages of tuberculosis; supported by charity.

Father dead, mother supported family by factory work; was away from 6:30 A. M. to 6:30 P. M.; earned \$9.00 which was entire income of family. Two boys, 9 and 10, came home from school at noon to prepare their own lunch and were without supervision before and after school hours. The neighborhood was very undesirable.

Table IV, surprisingly enough, divides the entire class of delinquents with proportionate evenness for the workers and the non-workers, into those coming from good, fair and bad homes. According to the close correspondence between these percentages it is impossible to attribute the unduly large proportion of working boys among the delinquents to any especially unfavorable home conditions.

TABLE IV. DELINQUENT BOYS CLASSIFIED BY KIND OF HOMES.

Kind of Home	Number			Per Cent.	
	Working	Non-W.	Total	Working	Non-W.
Good	184	293	477	30.00	29.00
Fair	225	362	587	37.00	36.00
Bad	176	317	493	29.00	31.00
Not stated	29	42	71	4.00	4.00
Totals	614	1,014	1,628	100.00	100.00

The transitory nature of most child employment makes it difficult to classify, but in the next table, the kind of employment of the working child delinquents is put down as nearly as possible, according to the occupation followed at time of arrest, or if the child was unemployed then, by that followed for the longest period preceding arrest. In 14 cases the probation records did not indicate what kind of work the boy had done, stating simply, "Has worked in several places," or

"has done odd jobs during the summer." It is a rare exception among working children who sticks to one position for very long. The small range of occupation, the small chance for any future for the working child or for any training are well illustrated here. Care must be taken, however, in trying to establish connection between the occupation and the number of delinquents engaged in it, to remember that the percentages shown here have nothing to do with the relative temptations to misbehavior, because we know nothing about the total number of boys employed at similar occupations who are not delinquent.

TABLE V. NUMBER AND PERCENT OF WORKING BOY DELINQUENTS ENGAGED IN SPECIFIC OCCUPATIONS.

	Number	Per Cent.
Amusement Resorts	9	1.50
Bootblacks	21	3.40
Delivery, Errand and Wagon Boys.....	241	39.20
Factory	47	7.50
Laundry	5	.80
Messenger Boys	9	1.50
Newsboys	146	23.80
Office Boys	23	3.80
Printing and Publishing	8	1.30
Stores and Markets	21	3.40
Street Traders	32	5.10
Miscellaneous (20 occupations, 4 or under in each).....	34	5.70
Kind of employment not stated	14	2.30
Holding work permit but not yet employed.....	4	.70
Total	614	100.00

It is interesting to note the number of cases in which some direct connection can be established between the occupation and the offense. Great care was taken to establish a clear case. The report says,—
 "By a **Direct Connection** case we mean a case where the offense which brought a boy to court can be fairly attributed to the conditions of his employment or to the influence of his fellow-workers. Such a connection is easily seen when an errand boy steals from the apartment where he has delivered an order, or when an office boy, discharged for misbehavior and refused his back pay, assaults his

former employer. The 48 children brought into court for violation of the child labor or newsboy or peddling laws, would all, of course, be direct connection cases. It is not so easy to decide in a case where a boy has lost his position unknown to his parents and says that his fear of going home on Saturday night unable to turn in his pay leads to his running away and his subsequent arrest as a "disorderly child: deserted his home." No such statements by the children themselves were accepted without verification by a probation officer who was familiar with the family and knew the attitude of the parents first hand. Even with this careful sifting out of all uncertain cases the percentage of cases where it is possible to establish a clear relationship between occupation and offense is startlingly high, over one-fourth of the whole number being so classified."

TABLE VI. DIRECT CONNECTION CASES BY OCCUPATIONS.

	Total Delin- quents	Number Total Direct Connection Cases	Per cent Direct Connection Cases
Amusement Resorts	9	6	66.70
Bootblacks	21	8	38.10
Delivery, Errand and Wagon Boys.....	241	55	22.50
Factory	47	7	15.20
Laundry	5	2	40.00
Messenger Boys	9	---	---
Newsboys	146	48	32.90
Office Boys	23	4	17.40
Printing and Publishing	8	---	---
Stores and Markets	21	7	33.30
Street Traders	32	18	58.10
Miscellaneous	34	5	14.70
Total	596	160	28.52

It is easy to account for the large number of direct connection cases among the boys employed in amusement resorts; among these, as well as among the street traders, the majority of cases were brought in for violation of the child labor law. But the high percentage among the newsboys seems to signify that the tendency to transgress varies with the amount of supervision given. The percent-

age is high in all the occupations represented by a significant number of workers, falling nowhere below 14 per cent, and maintaining an average for the entire group of 28 per cent. "It is hard to avoid the conclusion that the mere fact of being at work, irrespective of occupation, was a more potent factor than age or family condition in bringing these boys before the Children's Court." The report asks if there are not constructive measures which, if taken in time, might have kept some of these delinquents from the first step toward delinquency which was marked by their appearance in court. Table VII is a practical answer to the question.

TABLE VII. WORKING BOYS CLASSIFIED BY AGE AND OCCUPATIONS COVERED BY CHILD LABOR LAW.

Age, years	8	9	10	11	12	13	14	15	Total
A. CHILD LABOR LAW									
Amusement Resorts				1	1	3		4	9
Bootblacks			1	3	2	2	8	5	21
Delivery, Errand & Wagon Boys			3	4	10	16	75	133	241
Factory and Machine Shop.....						3	11	33	47
Laundry Workers							1	4	5
Messenger Boys							2	7	9
Office Boys					1	2	5	15	23
Printing and Publishing							5	3	8
Stores and Markets*							6	14	20
Miscellaneous						1	10	24	35
B. NEWSBOY LAW	1	8	6	20	25	42	23	20	145
C. PEDDLING LAW			3	1	8	9	6	5	32
Total	1	8	13	29	47	78	152	267	597

Note: Children indicated by bold-face figures are under age.

* One child, age not stated, had no permit.

Less than half of the boys held work permits, yet none of those illegally employed were in occupations unprotected by law. Of the 14 and 15-year-old children in the occupations for which a work permit was required 109 had no permit, for 35 the information was not available, and 210 were legally employed. This would suggest that better enforcement of the existing regulations for child labor and compulsory education would do something to check the stream of delinquency at its source.

Strong evidence was found of the necessity of proceeding against the parent, rather than the child, in certain forms of child labor.

There is also a need for more special schools for the retarded boy who is not mentally defective; such boys are not really accountable if their reaction against a school that has been built for the "average" child and does not fit their special interests and abilities, results in an explosion of commonly disastrous results. There is a special danger at this time of allowing over-age children to go into industry at an illegal age or before the legal stage in schooling has been reached. The State Board of Education in Pennsylvania recently passed regulations which would have the tendency to admit into industry over-age children of any age or grade whatever. That this was contrary to the Federal Law as well as to the State Law, did not seem to interest or trouble the authorities. No work permits have as yet been issued under these regulations, but the danger exists as long as the regulations stand on the books.

But granted the enforcement of such restrictions as we possess, what more can be accomplished toward reducing the numbers of delinquent working children? More efficient vocational guidance is one step. The restlessness, the constant shifting from one employment to another can have nothing but a demoralizing effect upon young children. If we knew more about the working conditions of probationers, we might see more clearly the reasons for their failure, and so be better able to prevent it. It is a fact of common knowledge that fatigue lowers resistance. There is another fact quite as evident—that it is better for most children between 14 and 16 to be in school than at work. All working children do not become delinquents, but if four times as many children who work become delinquent as the number of non-working children who go wrong, surely the knowledge of that fact should point to an obvious remedy.

INTELLIGENCE QUOTIENTS OF 68 CHILDREN IN A CALIFORNIA ORPHANAGE.¹

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Several clinical studies which have been made of children in orphanages, have revealed a large amount of mental inferiority and even of feeble-mindedness. In some cases the findings of psychologists were received with hostility and skepticism by those charged with the care and placement of dependent children. It was doubtless feared that the task of finding homes for deserving orphans would be rendered very difficult if the belief should become prevalent that such children are especially likely to develop mental or moral deficiencies not evident in early childhood. Some have deemed it necessary to "protect" such children from psychologists in order not to endanger their placement. Indeed, it is said that there are still many orphanages which refuse to give the prospective foster parents any information whatever regarding the antecedents of the child they propose to adopt.

This attitude cannot continue indefinitely. Certain facts regarding the heredity of feeble-mindedness and of other undesirable traits are rapidly becoming common knowledge. The time will soon come when no intelligent man or woman will for a moment consider adopting a child into his home without first being placed in possession of the facts regarding the child's heredity and intelligence. Child placing agencies will then find it necessary to abandon their former attitude in order to continue their work at all. However, indications of a better understanding of the situation are already apparent. In California the recent survey of orphanages promises to bear fruit.

The present study was undertaken with the hearty cooperation of those in charge of the children. Valuable supplementary information was furnished by the Superintendent and matrons, and the only

1. The children tested were inmates of a "Home of Benevolence". The tests were made by Miss Wagner. Terman worked up the results and prepared this article. Those in control of the Home co-operated heartily in supplying the supplementary data asked for.

stipulation was the proper one that data for individual children should be treated as confidential.

The 68 children (38 boys and 30 girls) were tested by the Stanford Revision of the Binet-Simon tests. The tests were made under satisfactory conditions and with due care for uniformity of procedure, thoroughness, etc. The following information sheet was filled out by the institution offices for each class:

SUPPLEMENTARY INFORMATION

(Absolutely confidential)

1. Name of child.
2. Exact age. Grade.
3. Intelligence, as compared with average children of same age: **Very inferior, inferior, average, superior, very superior.**
4. School marks, as compared with other children in same grade: **Very poor, below average, average, above average, excellent.**
5. How long has child been in institution?
6. Reasons for child being in institution. (Set forth as fully as possible.)
7. Illness child has had.
8. Present health.
9. Describe any personal or temperamental eccentricities the child may have.
10. Describe any moral peculiarities the child may have.
11. Pertinent facts about relatives (feeble-mindedness, epilepsy, alcoholism, delinquency, etc).
12. Miscellaneous.

The subjects were unselected in the sense that almost all the children in the institution were tested. Those not tested were random omissions and certainly did not represent any particular group or type. The distribution of chronological ages is given in Table I.

TABLE 1. DISTRIBUTION OF CHRONOLOGICAL AGES, ORPHAN-AGE CHILDREN.

	(Median, 12 years, 6 months)												
Age*	5	6	7	8	9	10	11	12	13	14	15	16 years	
No.	3	1	8	2	5	9	6	7	9	7	8	2 cases	

*Age 5 includes 5 years to 5 years 11 months, etc.

The intelligence quotients are shown in Table II.

The median falls at 92.3, which is a little, though not far, below that of unselected school children. We have found many school rooms

which gave a much lower average intelligence quotient than that found in this orphanage. The entire school population of villages and small towns often averages no better.

TABLE II. DISTRIBUTION OF INTELLIGENCE QUOTIENTS, ORPHANAGE CHILDREN.

		GOUPED IN RANGES OF TEN.
125-129.....	1	120-129..... 1
120-124.....	0	110-119..... 7
115-119.....	2	100-109..... 9
110-114.....	5	90- 99.....27
105-109.....	2	80- 89.....17
100-104.....	7	70- 79..... 6
95- 99.....	9	60- 69..... 1
90- 94.....	18	
85- 89.....	11	
80- 84.....	6	
75- 79.....	3	
70- 74.....	3	
65- 69.....	0	
60- 64.....	1	
Total.....	68	

Only one intelligence quotient is below 70, that of a girl aged 15-7 who tests at 10-9. Two boys test at 72; one aged 14-3, mental age 10-3; the other aged 15-11, mental age 11-6. A girl of 14-4 tests at 10-5, I Q 73.

All four of these may be considered high-grade feeble-minded or borderline cases. The father of one whose I Q is 72 is in prison for murder. The boy himself is said to be subject to violent fits of temper. The girl with 63 I Q is said to have an immoral mother. The father of the girl with I Q of 73 is alcoholic. The other borderline case, a boy with I Q of 72, has since joined the regular army. However, the percentage of feeble-mindedness and borderlinity (5.5%) must be considered unusually low for children in an orphanage. The low proportion is probably in part accounted for by the fact that there seems to be a consistent effort on the part of those in charge of the Home to keep out the feeble-minded, or if they have been received, to place them.

Data relating to the reliability of the tests have been secured as follows:

1. Correlation between intelligence quotients and ratings on intelligence. (Ratings furnished by the head matron.)

2. Correlation between mental age and school grade.

The ratings on intelligence and quality of school work were made on a scale of five: very inferior, inferior, average, superior, and very superior. The correlation between intelligence quotients and ratings on intelligence is shown in Table III.

TABLE III. RATINGS ON INTELLIGENCE, ORPHANAGE CHILDREN.

I. Q.	Very inferior	inferior	average	superior	Very superior	Total
120-124	-----	-----	-----	-----	-----	-----
115-119	-----	-----	1	-----	1	2
110-114	-----	-----	3	1	1	5
105-109	-----	-----	-----	1	-----	1
100-104	-----	-----	2	3	-----	5
95- 99	-----	-----	5	1	1	7
90- 94	-----	3	13	1	-----	17
85- 89	-----	4	6	-----	-----	10
80- 84	-----	2	2	-----	-----	4
75- 79	-----	1	2	-----	-----	3
70- 74	1	2	-----	-----	-----	3
65- 69	-----	-----	-----	-----	-----	-----
60- 64	-----	-----	1	-----	-----	1
Total..	1	12	35	7	3	58

$r=.594$

This correlation is about as high as we ever secure when the intelligence ratings are made by teachers or others who have not had special training in avoiding the pitfalls of rating. The child of 63 I Q is rated as average in intelligence, the explanation being that the actual age (15 years, 7 months) is several years above that of the average child in the institution. The child with I Q 118 who is rated only average is only 10 years, 3 months old and is doing superior work in the fifth grade, a grade in which the average mental age is not far from 11 years. The child's school record therefore bears out the test.

The correlation between mental age and school grade is shown in Table IV.

TABLE IV. CORRELATION BETWEEN MENTAL AGE AND SCHOOL GRADE, ORPHANAGE CHILDREN.

Grade	Mental age (6 means 5-6 to 6-5, etc.)											
	6	7	8	9	10	11	12	13	14	15	16	17
IX	---	---	---	---	---	---	---	---	---	---	---	1
VIII	---	---	---	---	---	1	1	2	4	---	1	1
VII	---	---	---	---	2	---	1	3	---	---	---	---
VI	---	---	---	---	---	2	6	2	---	---	---	---
V	---	---	---	---	---	4	4	1	---	---	---	---
IV	---	---	---	1	4	3	2	---	---	---	---	---
III	---	---	1	4	1	---	---	---	---	---	---	---
II	1	1	3	---	---	---	---	---	---	---	---	---
I	2	3	1	---	---	---	---	---	---	---	---	---

$r=.87$ (Pearson)

The correlation (.87) is very high. Taking as our standard,

Mental age 7-6 to 8-5, grade II.

Mental age 8-6 to 9-5, grade III.

Mental age 9-6 to 10-5, grade IV, etc.,

it is seen that but few children are badly misplaced. The exceptions are nearly all readily explained, for those above the grade where they belong by mental age are nearly all of low I Q.; that is, they are over age chronologically for their grade. One pupil of mental age 11 is in the eighth grade, but is nearly 16 years old and is doing inferior school work. Two others have a mental age of 10 and are in the low seventh grade. Both are over age and are doing inferior school work. All these are certainly graded too high for their mental age.

On the other hand, the pupils who are graded too low for the mental age are all children who are under age chronologically. One has a mental age of 16 and is in the low 7th grade. The actual age however, is exactly 14 years and the school work is superior. The educational lock-step has kept this pupil graded by chronological age, not according to his ability. The same holds for another pupil of mental age 12 in the low 4th grade. The age is 10-0 and the school work is rated "very superior."²

2. The pupils attended an excellent public school in the city of San Jose. The ratings on school work were made by the class teachers.

One purpose in making the investigation was to secure data relating to the influence of environment on the intelligence quotient. Some have contended that the rating a child receives on the Binet test depends so much on the factor of environment that it cannot without liberal allowances, be taken as an index of endowment. No one, however, has produced any evidence to show that such is actually the case. The findings have all been against the environment hypothesis.

One way of getting at the matter would be to select from the most unfavored homes a large number of children of various ages, give them Binet tests, then place them in the best possible homes and retest them at varying intervals, (using, of course, control groups). No one seems to have made such an experiment, although it could easily be carried out by any child-placing agency.

Another approach would be to test such children when they first enter an orphanage and at intervals after they have been in the orphanage for some time. Although the contrast between poorest home and good orphanage may not be as great as that between poorest home and best home, yet it ought to be sufficient to reveal the influence of environment if that influence is very considerable. Probably the well conducted orphanage offers a cultural environment as good as that of the middle grade home, if not better. The child who enters it from a poor home at the age of five or six years ought, on the environment theory, to show a considerable increase of intelligence quotient within a few years. However, data of this kind collected by one of the writers failed to show any improvement in intelligence quotients. The number of cases, however, was only twenty. The experiment ought to be made with hundreds.

Still another approach is to select a group of orphanage children (of a reasonably narrow age range), embracing the two following classes:

- (a) Those just taken from poor homes;
- (b) Those long in the institution.

If this could be done with enough children to counteract the effect of selection, then it could be expected, on the environment theory, that group b would show a higher average intelligence quotient than group a.

The number of cases entering into this study is small, but we have examined our results to see which way they point. Our 68 cases at the time the tests were made had been in the orphanage from a few days to 11 years. The average time was 3 years, 10 months. As already stated, the median intelligence quotient for the entire number was 92.3. Nine had been in the institution less than a year, and the average intelligence quotient of these was 94.8. There were also 9 who had been in the institution more than eight years, and their average intelligence quotient was 94.5. The average intelligence quotient of the five who had entered less than six months before the test was 96.5. The correlation between intelligence quotient and time in the institution was computed by the Pearson method and found to be slightly negative ($-.16$). This gives no support to the environment hypothesis, but of course the number of cases is too small to be taken very seriously.

The question regarding reason for the child being in the Home brought out the facts given in Table V.

TABLE V. REASONS FOR BEING IN THE HOME.

Mother dead	30 cases
Father dead	20 cases
Father alcoholic	11 cases
Mother immoral	8 cases
Father in prison	4 cases
Mother insane	2 cases
Father insane	2 cases
Parents separated	1 case
"Poor home"	1 case

Although the accident of death has been the most important single factor in creating this group of dependents, there is evidence of unfavorable heredity in several cases

The fathers of eleven are alcoholic; of four, in prison (one for killing the mother); of two, insane; and of two, dead by suicide. The mothers of eight were immoral; of two, insane; and of two, dead by suicide. Nearly half of the children would seem to be severely handicapped by heredity, although there is little feeble-mindedness in the group. Several have one or more feeble-minded or epileptic relatives.

The question on health, eccentricities and moral peculiarities did not give data of sufficient amount or reliability to warrant summarizing.

THE CONSTANCY OF THE I. Q.

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The importance of this subject leads me to record certain observations on retested children, in spite of the fact that the group retested is small, the examiners not highly trained, and the scales utilized not uniform. The retesting has happened largely by accident, for intelligence testing under my supervision has been carried on mainly for the purpose of training advanced psychological students in the giving of mental examinations. Our subjects have been taken largely from the small training school of the Department of Education, University of Wyoming.

In reviewing my records this fall I found that some thirty children had been given the intelligence tests two or three times. The first period of testing occurred in the fall of 1911, at which time the Binet scale of 1908 was utilized, with such instructions as were found in the First Edition of Whipple's "Manual of Physical and Mental Tests" (1910). The tests were given in excellent form by a student of psychology,—a critic teacher from the training school. I served as her clerk, took down all responses verbatim, and scored all the records. At that time neither instructions for the tests nor for scoring of them were standardized as they are today. Our procedure was somewhat exacting. We gave absolutely no help; asked no alternate questions; and scored very rigidly.

The tests of 1913 were carried on by two students in experimental psychology. They had training in psychological experimentation, but not in testing. They also used the 1908 form of the scale.

The 1915-1916 tests were made by Mrs. Clara Bowman, a student majoring in psychology and a teacher of experience, who had previously tested a large number of children and adults. Mrs. Bowman is a very tactful and even examiner. She used the Stanford revision of the Binet Scale and followed instructions for giving and scoring the tests very precisely. For purposes of comparison,

Mrs. Bowman also utilized the Binet-Simon 1911 Scale and the Yerkes-Bridges Point Scale, so that in the case of a number of the children these additional records are at hand, although they have not been included in the tabular summary.

The 1917 records follow the latest Stanford Revision. They were given either by myself or by careful student examiners. The records taken by Ko are initialled. Ko was a critic teacher in the training high school and a graduate student. He is a tactful and pleasant examiner but possibly somewhat optimistic in scoring.

In order to make the records comparable they are given in terms of the I. Q., obtained by dividing the mental age in months by the chronological age in months. See the tabular summary¹.

The records in which the B-S Scale of 1908 was used are the most questionable in value. We adopted Binet's suggested method of scoring in which the child is given the mental age at which he passed all or all but one test plus an additional year for every five tests or fraction thereof passed in advance. The method of scoring is somewhat unsatisfactory because of the unequal number of tests in different years. It would be quite possible to rescore our records on a point basis, equating the tests for the different years by evaluating each according to the number per year. Most of the records I have actually rescored in this manner and determined the amount of change in the I. Q. For the years in which we were particularly interested, this change usually meant a reduction in the I. Q. After consideration, however, it seemed better to allow the original method of scoring to stand, but I have checked over every test of each record. In any case our records are of value largely in a comparison of the general grouping of the same children at different ages. A detailed determination of the change in number of points scored at different ages would require constancy in scale utilized and, probably, of examiner. It may be remarked, however, that the 1911 and 1913 records agree with those taken at a later period to a rather surprising extent. They do not run as high for the younger children as one might perhaps anticipate from the criticisms on the scale. Of the twenty-four

1. Only 28 records are included in this summary. The other records were found inadequate in certain details.

TABLE I. SUMMARY OF DATA.

Name	Date ²	Age	Scale	I. Q.	Grade	Supervisor's est.
A 1	11-15	9-0	B-S 1911	109.7	IV	
	5-17	10- 6	Stanford	107.8	IV	
	3-16	9-3	Stanford	104.	VI	Very superior
B 1 (Ko)	11-11	6-8	B-S 1908	96.2	I	
	5-17	12-2	Stanford	117.7	VII	Average
B 2	11-11	6-0	B-S 1908	100.	I	
	3-16	10-3	Stanford	100.	V	Average
B 3	4-16	13-3	Yerkes	34 pts	(Dependent)	
	7-17	14-6	Stanford	55.1	III	3
B 4	3-16	6-11	B-S 1911	72.	.....
	7-17	8-2	Stanford	76.	II	3
B 5	11-15	5-2	B-S 1911	116.	.....
	3-17	6-6	Stanford	105.	I	Average
B 6	10-11	9-0	B-S 1908	86.1	III	
	2-16	13-4	Stanford	84.3	V	Inferior
B 7	11-11	7-0	B-S 1908	101.	I	
	12-17	13-1	Stanford	78.3	VI	Inferior
C 1	12-11	6-9	B-S 1908	96.	I	
	2-16	10-11	Stanford	96.2	V	Average
D 1	10-11	6-1	B-S 1908	115.	I	
	5-13	7-7	B-S 1908	121.	III	
	6-17	11-8	Stanford	124.	VII	Superior
D 2 (Ko)	11-11	6-7	B-S 1908	97.4	I	
	6-17	12-2	Stanford	104.9	VII	Average
D 3	12-11	8-3	B-S 1908	95.	.....
	2-16	11-4	Stanford	110.	VI	
(Ko) D 4	6-17	12-8	Stanford	121.	VII	Superior
	11-11	8-6	B-S 1908	117.6	IV	
D 5	11-17	14-6	Stanford	112.	XI	Superior
	5-13	10-5	B-S 1908	89.		
	12-17	15-0	Stanford	83.3	VI	Average ⁴
F 1	10-11	3-5	B-S 1908	128.	.....
	11-17	9-6	Stanford	112.	IV	Superior
G 1 (Ko)	10-11	5-8	B-S 1908	123.5	I	
	6-17	11-4	Stanford	135.5	VII	Very superior
G 2	5-13	8-3	B-S 1908	100.	.....
	2-16	11-0	Stanford	93.2	V	Average

2. Month and year.

3. Not in training school.

4. Not in training school. Teacher's estimate.

G	3	5-13	8-9	B-S 1908	110.4	-----	
		7-17	12-0	Stanford	112.2	VIII	Average
H	1 (Ko)	11-11	6-3	B-S 1908	116.	I	
		5-17	11-9	Stanford	117.	VII	Average
I	1	11-11	6-5	B-S 1908	96.	I	
		2-16	10-7	Stanford	98.4	V	Average
J	1	12-11	9-0	B-S 1908	112.9	-----	
		3-16	13-3	Stanford	102.5	VIII	Average
M	1	12-11	6-0	B-S 1908	113.8	I	
		2-16	10-2	Stanford	105.5	V	Average
M	2	11-11	6-2	B-S 1908	100.	I	
		5-13	7-8	B-S 1908	104.		
		11-15	10-2	Stanford	101.	IV	Superior
P	1	12-11	6-0	B-S 1908	109.7	I	
		10-15	9-10	Stanford	104.	IV	Average
S	1	12-11	9-2	B-S 1908	106.3	IV	
		4-16	13-5	Stanford	111.2		Superior
S	2	11-12	8-0	B-S 1908	92.7	II	
		11-15	11-0	Stanford	91.2	V	Average
T	1	11-11	6-1	B-S 1908	100.	I	
		3-16	10-4	Stanford	100.	V	Inferior
R	1	5-13	9-1	B-S 1908	79.6		
		3-16	11-0	Stanford	84.5	V	Inferior ⁵

cases belonging to this group there are just as many giving a lower record in comparison with later scores as give a higher record. Three of the five big discrepancies are in the direction of a higher score on the 1908 scale. We shall discuss these cases a little further on.

In passing, however, I wish to remark that possibly three factors operated in keeping of our scores for 1911 somewhat low: (1) We in no case gave the slightest help in the way of alternate or repeated questions; (2) we were perhaps less encouraging in our general manner than we should be today; and (3) we did not employ as wide a range of testing as we should now.

Let us now examine the table in detail, utilizing in general discussion Terman's scheme for group classification.⁶

5. Language handicap.

6. "The Measurement of Intelligence", p. 79.

Above 140, "near" genius or genius; 120-140, very superior intelligence; 110-120, superior intelligence; 90-110, normal, or average, intelligence; 80-90, dullness, rarely classifiable as feeble-mindedness; 70-80, borderline deficiency, sometimes classifiable as dullness, often as feeble-mindedness; below 70, definite feeble-mindedness.

Of the twenty-eight cases reported in the table, nineteen would be classified in the same group at different periods, nine in different groups. Of the nineteen constant cases ten fall in the average group; four are superior; one very superior; three are dull, or borderline cases; one is feeble-minded. In the average group, the two testing high normal in 1911 are also high normal in 1915: the two testing low normal in 1911 are low normal by the later score.

Of the nine cases showing a shift in classification, one-third actually show but little variation in scoring. Their I. Q.'s are on the borderline between two frontiers, so that the change of a few points effected a change in classification. Six cases exhibit a considerable variation in score. Each of these cases must be carefully scrutinized.

B-5 and F-1 were tested at a very young age. The Binet Scale 1908 is unquestionably too easy at these ages and accounts for this discrepancy.

The other four cases are not so easily disposed of. B-1 shifts from low normal to the superior group. Our original record bears the comment that he was timid and that it was very difficult to get him to respond: it is quite possible that he failed to do himself justice at the first testing: The examiner of 1917 found him very much alive and interested. But this examiner, as we have remarked, would probably be classed as easy in scoring. The estimate of the supervisor places him as average in intelligence, and his school success is only average. In any case there is a real discrepancy in his record which may be due to inexpertness on the part of the examiners or to actual change in the I. Q., probably the former.

J-1 shifts, on the other hand, from the superior to the average group. This case would seem to indicate a real fall in the I. Q. In 1911, the child was nine years. The B-S Scale is held to be fairly accurate in the middle range, so that so great a fall in score can hardly be attributed wholly to the deficiency of the scale.

D-3's case is most interesting. He has been tested three times with considerable variation in result. This child is somewhat incorrigible, a puzzle to his teachers who have several times inquired of me whether or not he is normal. Questioned, they conceded his normality of intelligence: very evidently they are concerned with certain tempera-

mental peculiarities, including emotional instability. It may be that his fluctuation in record is due to the varying degree with which the examiners enlisted his cooperation. As the family history of this boy—on both sides—is most erratic this case will be an interesting one to follow up.

B-7 shifts from normal to borderline intelligence. This is the most startling shift in our group. In 1911 we described him as excessively timid, abnormally sensitive. He was under-sized and near-sighted. The general impression was that of a subnormal child. He was examined with the greatest care as his brother (B-6) had been found to be mentally retarded and the boy himself was carrying first-grade work for the second year. He succeeded in making his year and was classified as normal. Temperamentally, he was in great contrast to his brother as he was docile and gentle while the older boy was unruly and boisterous. In 1917, after a lapse of six years, I find evidences of considerable retardation. The boy is still frail in appearance and very timid. He is apt to sit inert and dumb when questioned, not because of unwillingness to respond but because of difficulty in adjusting himself to the situation. He is easily disconcerted. It took me some time and effort to win his confidence and get him wound up so to speak. One failure is perhaps due to the entrance into the room where the examination was being conducted of a third person. Although the examination was discontinued until the withdrawal of the intruder this slight disturbance served to undermine the boy's mental set, which had again to be established with effort. Eventually he became interested and amused by the tests, so much so that he agreed with evident pleasure to the suggestion that he return the following day for further work. There is some scattering in his record. He succeeded without the slightest hesitation with the ball and field test, superior plan: he enjoyed and interpreted the fables: gave a highly imaginative, though somewhat far-fetched, interpretation of the pictures: and saw absurdities with apparent enjoyment of the incongruity: but his memory was very poor and he was completely bewildered by comprehension questions and utterly unable to handle the vocabulary test or abstract ideas. His case is one that would call for the most skillful diagnosis. Certainly I would

be unwilling to pass an opinion as to the precise mental status of this boy from the results of the scale alone.

Two of the children, P-1 and R-1 suffer from a language handicap, since English is not spoken in their homes. In spite of this handicap P-1 makes a normal record nor can R's low I. Q. be attributed wholly to this obstacle. It is, however, not surprising that R's record in 1916 should be above that in 1913 since he has had more time in which to master the English language.

The score of each child may be compared with his school success and the teacher's estimate of his ability. School success is indicated in a general way by a comparison of the school grade attained and the chronological age of the child. This is indicated on the table.

In the 1911 tests thirteen of the children were just beginning the work of the first grade so that at that time there could be no question of academic retardation or acceleration. Of this group we picked on the basis of our examination G-1 and D-1 as easily the most promising and H-1 as clearly above normal. These three have actually made the greatest school progress of the group. The school success of G-1 and D-1 is reported as superior and that of H-1 as average: The three are each one year in advance of their chronological age. But G-1 and D-1 are certainly not profiting as they should by their superior ability, although it is recognized, to a degree, by their teachers. M-1 has also failed to profit by her somewhat superior intelligence. The average children have progressed normally from grade to grade. This group of first graders contained no mentally retarded children.

Of the older children tested in 1911 B-6, who was at that time academically retarded one year, was in 1916 three years retarded, an outcome that might have been anticipated if his I. Q. remained constant. B-7 who was then retarded one year is now retarded two years: D-4 less than a year in advance of his years in 1911 is now two years in advance of his age, and is profiting academically by his superior intelligence more than any other child in the group, a matter in which possibly he is aided by a confident and optimistic temperament. Temperamental peculiarities probably account for S-1's failures to make more rapid progress. He does not lend himself readily

to the routine and constraint of school work, and D-3, as we have said, is emotionally unstable. S-2, who may be included in this group, was academically retarded a year at the time of both intelligence tests, a retardation in harmony with her low-normal I. Q. D-5's retardation is increased beyond what would be indicated by his low I. Q., but he has had a very unfortunate home environment which may be in part responsible for this. Individual comments on the other records are perhaps unnecessary except in the case of F-1 which will be cited a little farther on.

For an estimate of the child's intelligence I had recourse, in the case of the University children, to the supervisor of the elementary school, Miss Ruth Adsit. Miss Adsit's relationship to the children is not that of the grade teachers but more general and also more extensive. She very evidently based her judgment less upon success with specific school subjects than does the average teacher. In general, her rating of a child was quite in harmony with the I. Q., more so perhaps than was the school success. Thus she recognizes the very superior ability of G-1; and the superior intelligence of S-1 in spite of his average to inferior school success. She rates D-3 as superior, with the addition "devilish superior." In a few cases her judgment would be slightly at variance with the scale results. She classes A-1 as very superior whereas on the scale she ranks only as normal: G-3 and H-1 are classed as average rather than superior, T-1 is called inferior although he is average by the scale. M-2 is classed as superior because of the possession of special ability and in spite of inferior school success.

D's teachers classified him as average in ability, a curious thing when taken in conjunction with his school record. He is, however, both small for his years and very attractive in appearance, facts which probably influenced their judgment.

Ten of the children listed above were also scored on the Yerkes-Bridges Point Scale in connection with another problem. On the basis of the index of intelligence (Actual Score divided by Expected Score) Yerkes classifies his reagents into seven groups which in a general way are probably comparable to the seven groups of Terman's classification. The classification of B-3, B-6, C-1, S-1, S-2, and

T-1 would be in agreement for the two scales. The other four children give a comparatively higher score on the Point Scale than on the Stanford. M-1 falls at the upper end of Yerkes' supernormal group, a result which is not in line either with her school success or the Supervisor's judgment of her ability. G-2, I-1, and J-1 would also be transferred into the group one degree above normal, a classification that is not justified by anything we know of these children.

Our general feeling after experience with both the Stanford Revision of the Binet Scale and the Point Scale is that while the scores obtained by the two are in pretty fair agreement, we have a much more satisfactory knowledge of the child's makeup after giving him the Stanford Scale than from use of the Point Scale. The advantage of the greater speed and convenience with which one may obtain a rating by the Point Scale is, in part, offset by the need for supplementary tests which serve to prolong the examination as greatly as if one had used the Stanford Scale in the first place. Moreover, the supplementary tests used in merely supplementary fashion afford less satisfaction in the way of uniformity of procedure.

That standardized scale tests will gradually make possible accurate observation of many things besides mentality levels cannot be doubted. They should prove of greatest possible significance in the study of family traits and of the early appearance of special abilities. This is a problem upon which I am at present gathering data. Further analysis of the child's record often enables one to determine the reason for discrepancies between a child's school success and his I. Q. Take, for example, F-1. Both by the scale record and by the supervisor's estimate F would be ranked as a child of superior intelligence but her progress in school has been that of an average child. Study of her record shows that she excels in tests involving judgment, reasoning and construction, but she is very hesitant in expressing herself in words, a slowness that cannot be attributed to a poor home environment. At home she gives evidence of excellent practical judgment and capacity. She is excessively fond of games of all sorts, little for reading. At nine and a half years she passed all of tests IX and, in addition, X 2, 3, 4, 5 and XII 4, 5, 6, 8, and, probably, likes to play with numbers and has a big digit span but she cares

7, but she failed to make her vocabulary for X and XII and she did not quite reach the score for X, 6 (sixty words in three minutes). Referring to her Binet records taken at three and a half years I find her reluctant in response to the definition test and under pressure giving the infantile reactions characteristic of so young a child, while, in direct contrast, she executes with alacrity three commissions, scores on aesthetic comparison, can tell the time of day and knows her right hand from her left, tests which by present day standards are appropriate for a mental age of five and six years. She was able to tell time before entering school, although I do not have the exact record. Certain other interesting facts have been noted in her case pointing to an early betrayal of specific traits which I shall describe in another place. But in this connection I wish to make the point that the criticisms made against the Binet Scale on the ground that it gives an undue advantage to the child who is a verbalist in type holds probably in stronger degree for school success and may quite possibly be directed against life itself, at least in certain of its aspects. As yet we do not have any adequate analysis of what traits characterize verbal and concrete thinking and of the relation of each to so-called general intelligence. Such an analysis is urgently needed.

One further point. These instances of early observation of capacity are of extreme importance not only because they may be utilized in guiding education but because they furnish material for estimating the relative influence of heredity and environment upon the results of the scale tests. Certainly such an example as the one just cited can in the light of the child's home environment be interpreted only in terms of native tendencies.

In the above report I have made no attempt to discuss the theoretical implications of the I. Q., although a number of significant problems suggest themselves. My purpose was a very simple one, to report a few observations as to the constancy or lack of constancy in the mentality level as measured by a specific material. Even though a given classification on the basis of the I. Q. were admittedly arbitrary, this fact would not affect materially the interpretation of such records as those reported above.

EDUCATIONAL RESEARCH WORK IN NEW ORLEANS.

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I. HISTORY OF THE DIVISION.

Inquiries concerning the work of the Division, and requests, continue to come to the undersigned from persons who evidently do not know that the program of research there has been ended. The Division of Educational Research was an outgrowth of the Tulane University-Board of Education Study, organized in 1912. It is of interest to workers in this field, to note with the passing of this Division, that historically the establishment, by the Commission Council, of the Division of Educational Research in New Orleans (originally designated "Department of Educational Research" by the municipal ordinance of July 1913 authorizing the same), was the creation of the first institution for educational research in this country, supported by public funds and in connection with the public school system, which has undertaken simultaneously these different types of study: (1) Extensive analyses of local industries and occupations with reference to education; (2) comparative studies of trades and special schools throughout the country; (3) statistical, and group analyses—complete "child-accountings"; (4) individual studies of exceptional children through the participation of psychologist, physician, teacher, parent, and social investigator, by means of a successful, co-operative procedure; (5) measurements of achievement in school subjects—reading, arithmetic and spelling, and standardization of scores; (6) instruction of prospective teachers in methods of measurement; (7) special studies of delinquent boys; (8) special studies of supervision and of textbooks; (9) quantitative studies, through personal investigation, of the causes of elimination. The scope of the endeavors is to be noted as it indicates the demonstrated possibility of applying, to a wide range of problems, systematic efforts at educational research as a guide to officials and the public in school administration. Schoolmen often have been ready enough to study spelling, arithmetic, etc., or to observe defective children,

or to compile a type of statistics, but have been lacking in accurate studies of industries and occupations as related to education.

It will suffice in this statement to give further (II) an outline of the work of the last year, and (III) to present a memorandum of all printed reports of the Division, and of related articles. The writer may publish an elaboration of this present outline, including the collated tables, data, etc.—too lengthy for reproduction here.

II. THE WORK OF A YEAR.

Work of the last year. The results of the studies of the last year have been published locally, but with certain omissions, since the writer's departure from New Orleans. Activities during the year comprised the following:

1. **Repeaters.** The numbers and definite location of all the pupils at that time doing again the work of a grade, were ascertained. Five thousand repeaters were located, the numbers being classified according to the repetitions being of the first, or second, or even the third time. Notes concerning causes, and suggested remedies, collated from the principals in some eighty schools, were also presented in a typewritten report.

2. **Exceptional children.** The work of studying extreme cases by practical co-operation of psychologist, teacher, parent, physician, and sociologist continued on a slackened scale, owing to the failure to provide special classes and remedial measures.

3. **Lectures for teachers.** Fifty lectures were given by the Director to prospective teachers. The aim was to inculcate some knowledge and skill in the use of measurements in education.

4. **Elimination.** Miss Railey personally investigated the causes of withdrawal of thirteen-year-old children from the schools, in continuation of her former work.

5. **Vocations of Girls.** Miss Railey began a systematic study of occupations of girls in certain factories, with reference to education.

6. **Supervisory studies.** The Director expended three weeks in classrooms studying typical methods, textbooks and courses of study. Report was in typewritten form.

7. **Textbooks.** Critical examination of textbooks proposed for the schools was made and reported upon.

8. **Studies of Spelling.** With the help of twelve assistants (former students of the writer) and of the principals, the Ayres Spelling test was given to 25,000 children. The papers were all corrected by trained assistants. The tables are of general interest because; (a) The illustrative sentences used were uniform throughout the city; (b) unusual care was exerted by paid assistants for accuracy of marking and of tabulation; (c) contrasts are available for results upon a large scale, of the spelling of white and of negro children.

Investigators who may use the Ayres test will note that our comparisons of this Springfield test list of 70 words, contrasted with the list of 70 words used in the Butte, Salt Lake City and Des Moines studies, reveal slight variations from the original Springfield list—a matter not noted in the reports of the three investigations referred to above. Furthermore, nine words in the Springfield list of 70 words are not contained in the final list of one thousand words (or “scale”) published in chart form by the Sage Foundation—a matter that seems to have been overlooked in the above studies. This fact also invalidates minute comparisons of results of the above Ayres tests, city with city.

9. **Reading tests.** The Starch and the Kansas tests, for silent reading, were given in typical schools. The papers were scored by trained assistants.

10. **Arithmetic tests.** The Courtis tests, Series B, Form I, were given to some 15,000 children, white and colored. The results were checked by assistants.

11. **Completion of industrial survey.** This was the major undertaking of the Division, and was the culmination of two years' study of industries and occupations of men and boys, with reference to education. Employers, employees, officials, teachers, the Association of Commerce, Union Labor, and the Press, co-operated well in helping the Director to complete this study. The scope of the work is indicated by the topics of the sixteen sections of the final report, e. g. (1) Preliminary statistical review of the occupations of boys and men; (2) Metal working industries and the related occupations; (3) Power, light and heating plants, and related occupations; (4) Electric manufacturing and construction, telephones, telegraph and the

related occupations; (5) Lumber and its remanufactures; (6) Local building trades; (7) Printing and publishing industry, and related occupations; (8) Miscellaneous industries and occupations; (9) Cooperation with U. S. naval authorities; (10) Sea-food culture; (11) Scientific agriculture, dairying, and horticulture for city boys; (12) Responses from labor unions; (13) Problem of a negro department; (14) Vocational guidance in New Orleans; (15) Courses of study for the Delgado School, developed from the preceding studies; (16) Plans for initial buildings, and for safeguarding selection of a site; (17) Machinery and equipment; (18) Notes on finance; (19) A plan for control and organization of the Trades School; (20) Summary or conclusion.

III. PRINTED REPORTS AND ARTICLES, 1913-1916

A. Reports by the Division:

1. Extreme Individual Differences in Children of the Public Schools. Published by School Board, 92 p. ill., 1913.

2. An Experimental Study of Delinquent and Destitute Boys in New Orleans, and Notes Concerning Preventive and Ameliorative Measures in the United States. Published by Commission Council, 130 p., ill., 1914.

3. Measures in Elementary Education:

(a) Studies of the Progress of 36,284 School Children and the Related Problems.

(b) The Educational Laboratory.

(c) Concerning Industrial Education, Published by School Board, 1914, 71 p., ill.

4. Educational Research in Public Schools:

(a) Comparative Measurements of the Progress in School of 36,000 Children during Two Years.

(b) A Practical Study of Elimination.

(c) Occupational Preferences of 7,000 Pupils Thirteen Years of Age and Older, of their Parents for Them.

(d) Further Studies of Individual Variation. Published by School Board, 211 p., ill., 1915.

5. Part Three, Annual Report of the New Orleans Public Schools, 1915-1916.

6. Measuring Achievements in Reading. Leaflet, 1916.

7. Facts about the Public Schools of New Orleans in Relation to Vocation. Published by Commission Council, 58 p., 1914.

8. Industry and Education, A Preliminary Study of Manufacturing Establishments of New Orleans and of Mechanical Occupations of Boys and Men with Reference to Education, and a Plan for the Delgado School. Published by Commission Council, 409 p., ill., 1916.

B. Articles Relating to the Work of the Division:

9. First Measures Urgently Needed for Child Welfare Upon the Part of Municipal and State Authorities. Hill, Southern Medical Journal, 1911; Psychological Bulletin, 1912.

10. A plan for the Co-operation of Educational and Medical Departments of Universities, and of Municipal Authorities in School Hygiene. Hill, Proc. of Int. Congress School Hygiene, Vol. III, 1913.

11. Preliminary Census of Exceptional Children. Tulane—Board of Education Study. Gwinn and Hill, Chart 34x11 inches, 1913.

12. Exceptional Children in New Orleans. Report of Public School Alliance, Hill, Chairman, 1913, 93 p.

13. Outline of Procedure, and Summary of New Orleans Board of Education—Tulane Co-operative Agreement, Form 1, 1912.

14. Minor Studies in Learning and Relearning. Hill, Journal Educational Psychology, 1914.

15. Educational Research in New Orleans, Journal of Educational Psychology, Nov. 1914.

16. Review of the New Orleans Undertaking, by Witmer, Psychological Clinic, Jan. 1914.

17. New Orleans and Its Schools, Owen, American School, May 1915.

18. The Practical in Educational Research. Hill, Psychological Clinic, 1916.

19. The Practical in Educational Research. Hill, Journal of Administration and Supervision, 1916.

20. Vocational Guidance in the South. Hill, School and Society, February, 1915.

21. Summary of Survey of Industries and Mechanical Occupations, etc. Hill, School and Society, September 18 and 25, 1915.

22. Significant Problems of Education in New Orleans. Hill, School and Society, August, 1916.

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No. 3

REVIEWS

REED COLLEGE RECORD. A Statistical Study of American Cities. Social Service Series No. 4. Portland, Ore., Dec. 1917. pp. 41.

A comparative study of thirty-six American cities "in answer to eighteen questions concerning municipal betterment". The cities are ranked with reference to the following items: wage rates, cost-of-living, death rates, infant mortality rates, population married, church membership, child labor, parks, pavement, fire loss, public properties, circulation of library books, school attendance, school property, teachers' salaries, number of pupils to a teacher, illiteracy, foreign born unable to speak English. It is believed to be significant that (p. 3) "all Western cities are in the first quarter, nearly all Southern cities in the last quarter, and most cities of other sections are in the middle quarters". In the final summary (p. 41) in which cities are ranked with reference to their relative position in all items, the highest five are Seattle, Salt Lake City, Denver, Los Angeles, and Washington. The median five are Milwaukee, Newark, New York, Pittsburg, and Chicago. The lowest five are Scranton, Jacksonville, Atlanta, Charleston, and Birmingham. The ranking for each item and all items combined are shown in interesting and convenient graphic tables. The data have been gathered from reliable sources and the study is an excellent example of the unprejudiced presentation of facts. President William T. Foster prefaces the study with an interesting foreword.

J. H. W.

WARD, FRED. *First, Second and Third Annual Reports of County Work Farm. Duluth, Minn. 1914, pp. 31; 1915, pp. 15; 1916, pp. 14.* These interesting reports tell briefly of the character and work of the men who are sentenced to wholesome out-door farm work instead of being detained in jail. At the end of the third year 2,495 men had been committed to the Farm. Of these 341 were married, 2,072 single, and 82 widowers. The average age is about 40 years; the average sentence 23.73 (days?). The leading causes for commitment are (1) drunkenness, 852 cases; (2) vagrancy, 161; (3) trespass, 102; (4) disorderly conduct, 63; (5) drunk and disorderly, 51; (6) begging, 35; (7) petit larceny, 34. Of the total 2,495 cases, 2,367 were committed from the municipal court at Duluth. The leading occupations of the men are (1) laborers, 1,776; (2) sailors, 91; (3) marine firemen, 76; (4) teamsters, 63; (5) miners, 55; (6) cooks, 49; (7) carpenters, 43. The leading nationalities are (1) American, 637; (2) Finnish, 464; (3) Swedish, 408; (4) Norwegian, 285; (5) Irish, 153. The practical nature of the work done, the financial assistance furnished by these men to their families while serving their terms, and the interest taken by the superintendent, indicated by his statistical summaries, all suggest that this has proven an efficient method of dealing with social deviates.

J. H. W.

CORRESPONDENCE AND DISCUSSION

THE DULUTH SPECIAL CLASS FOR BOYS.

To the editor:

As you know, Minnesota has taken an initiative in the study and care of subnormal and exceptional children. To that end opportunity classes are organized and put in charge of teachers who hold the Special Certificate.

Last fall when new classes were being formed it was found that there were a number of boys on parole from the court who were not reporting at school. The superintendent asked me to take this list and from it gather recruits for a special boys' class. Some time was spent in going to the homes and factories for my material. Many were working and preferred to so continue, but being of school age were, nevertheless instructed to report to me. It was really surprising that so many came.

This group, together with cases of incorrigibility and truancy from the schools and other sources consisted of 15 boys. When given the Stanford Revision of the Binet Scale all graded within the state requirements governing subnormal classes. The school room is furnished with tables and chairs, with only such decorations as boys would choose.

The morning program includes arithmetic, language, spelling, writing and reading. The day begins with singing, which is followed by drill with the Studebaker arithmetic cards. All lessons are directed toward a special end. No grading is attempted. From time to time men of the city are invited to meet with the boys. In this way ideals are being formed and ambitions aroused. Each week one or more officers from the recruiting office tells of experiences in the trenches. At noon lunch is served under the supervision of the teacher. In the afternoon the manual training teacher takes charge. Shop work is extremely popular with the boys. Discipline is kept to the minimum by making manual work a privilege.

The plan has proven quite successful. We have succeeded in keeping practically all of our boys out of the courts. During the year we have handled about 30 boys.

Duluth, Minn.

LAURA L. VIELEY.

INSTITUTION REPORTS

(Note: Reports intended for mention here may be sent to Samuel C. Kohs, Stanford University, California.)

DISTRICT OF COLUMBIA. National Training School for Boys, Washington. Report of Board of Trustees for the fiscal year ended June 30, 1917. The superintendent says (p. 7): "You will note from the (above) statistics that 25 of the boys committed to the school had been in other institutions and 103 had been placed on probation by the courts having jurisdiction. So when a boy comes to the school he is committed because other means have failed to get the required results. The record shows that but 35 boys had attended school regularly and 11 never had attended school at all, and 8 did not even know the alphabet.

It is evident from the above facts that there has been neglect in caring for these delinquents and the question at this time is: Are we prepared to give what they need with our present facilities? Our school system should be changed and this can be brought about only by the employing of more teachers whose time will be devoted exclusively to teaching and preparation for the classroom work. In my last report I recommended the employment of more teachers, and feel sure that Congress does not appreciate the crying needs of the wards the government undertakes to educate and start on a higher plane of living. We should at least do as much for our boys as the states do for their delinquents.

The progress made during the year has been encouraging. Boys who come to us usually have no respect for authority and when restraint is placed upon them it is very irksome for a while, but they soon learn that obedience to authority is the first principle of law. More than 95 per cent of the boys respond to the new conditions of living without the least friction. They soon learn they are among friends who are interested in their future welfare. We can teach a boy how to live and warn him of the many pitfalls he will encounter upon leaving the school, but the real reformation must take place in his own heart. We are pleased to state here that the many letters received from boys who have gone out and found their place in the business world give us great pleasure and encouragement.

VOCATIONAL INSTRUCTION

Under this head we are striving to teach the rudiments of the following vocations which means a great deal to a boy. We do not claim to fit him to go out as a finished workman, but we do start him in one of the following trades, and on leaving the school he may continue the line of work started while here, to-wit: Carpentry, painting and glazing, plumbing and steam fitting, care and management of steam boilers, general blacksmithing, tailoring, shoe making and repairing, baking of bread and all sorts of pastry, sloyd work and cabinet-making, cooking, floriculture, gardening and general farming, care of stock and dairy.

PERIODICAL LITERATURE

DARWIN, LEONARD: DIVORCE AND ILLEGITIMACY. Many eugenists fear that the Divorce Reform Law (English) would tend to demoralize the nation by lessening the regard in which marriage is held, and that any legislation whitewashing illegitimacy would be harmful. Under this legislation, those who had been separated for three years would be given the right to apply for a divorce. This might effect a decrease in the number of illegitimate unions and, at the same time bring about a lowering of the national standard in regard to sex matters. The Norwegian Act contains several provisions regarding illegitimate children which would be subject to grave abuses. Some of these clauses are (1) "the illegitimate child shall have the right to take its father's name"; (2) "the child shall be brought up and educated according to the conditions of whichever of its parents is most well-to-do"; and (3) "the child shall inherit from its father and his relatives as if it were born in marriage". The descendants of illegitimate unions are on the average inferior in civic worth to the descendants of legitimate unions. As it will make for the future progress of the world that the higher social levels should be filled by the more fit, it seems advisable that the illegitimates should remain in the lower levels. The illegitimate mother

should receive fairer and humaner treatment, and the fathers should be made to feel the full responsibility of parenthood, but any policy which deteriorates the quality of birth in the hope of increasing quantity should be discouraged.—*Eugenics Review*, IX-4, Jan. 1918, pp. 296-307. W. W. C.

LLOYD, S. M. and ULLRICH, O. A. JR.: THE PROGRESS OF PUPILS IN AN UNGRADED CLASS. A study of pupils in three ungraded rooms recently organized in the schools of Austin, Texas. Pupils were given the following tests: Trabue completion, Thorndike reading, Starch arithmetic, Courtis arithmetic. Tests were given in two sets of equal difficulty with an interval of 4½ months between. This marks the period of one promotion grade in the Austin schools. Tests were supplemented by a personal study of each case with reference to development and advancement, based on teachers' judgments. The results showed that more than one-half of the pupils gained one or more grades. Of 45 cases, 22 were restored to the regular grades. The improvement was, of course, chiefly scholastic and not mental. The teachers' estimates were usually higher than the test results warranted.—*Psychological Clinic*, XI-9, Feb. 1918. pp. 276-287. J. H. W.

STEVENS, H. C. and RUSSELL, LELAH C.: A RETARDED PUPIL RESTORED TO GRADE. A boy, 8½ years of age, whose paralyzed arm was supposed to indicate a brain lesion, was found unable to learn to read or write by ordinary methods. Failure was followed by discouragement and lack of interest. When placed in the subnormal room it was found that he knew nothing at all about school work. The learning process seemed imperfect and undeveloped. He showed no interest in things which ordinarily interest children of the same age. Examination with the Yerkes-Bridges Point Scale gave a mental age of 8 plus. Physical development was slightly below the average. Wasserman reaction was negative, Romberg (coordination) sign positive. Paralysis was found to be a lower motor neurone lesion, and not a brain affair at all. Traction upon the arm at birth may have torn the roots of the motor nerves of the arm. This, with mental tests indicating practically normal intelligence, suggested that he was trainable by proper methods. A course of special instruction, beginning with play, awakened his interests and he soon acquired a vocabulary of words, chiefly pertaining to action (run, jump, fly, walk, etc.) From these his learning developed until he was eventually restored to his correct grade. The training required about 8 months.—*Psychological Clinic*, XI-9, Feb. 1918. pp. 271-275. J. H. W.

SUTHERLAND, A. H. (Quoted by M. S. M.) RETARDED CHILDREN IN LOS ANGELES. With the assistance of seven teachers released from classroom instruction for six weeks Dr. Sutherland made a survey of 24 elementary schools in Los Angeles including ungraded room pupils, 33.3 per cent of those who failed of promotion in the preceding February examinations, and the entire enrollment of two parental schools. The Goddard (1911) revision of the Binet-Simon scale was used. The exam-

ining teachers were carefully instructed so that uniformity of procedure was secured. The proportion of defectives in the ungraded rooms was 70.4 per cent; non-promotional group, 34.2 per cent; parental schools, 81 per cent. These were pupils who were found three or more years retarded. These figures would indicate that probably 9000 children in the elementary schools would grade equally low. Almost one-third of these children, however, have been found to be physically defective to an extent capable of being responsible for a part of the backwardness. "We estimate that there are about 5,000 children whose mentality will grade three years or more below normal, in whom the routine medical examination will reveal no adequate cause".—California Blue Bulletin, 1-4, Mar. 1918. pp. 14-15. J. H. W.

TAYLOR, FLORENCE I.: PHYSICAL WELFARE OF EMPLOYED CHILDREN. The number of child workers is being rapidly increased by the war because of scarcity of labor, high wages, and increased cost of living. There are hundreds of occupations, harmful to the health of grown men and women that are especially dangerous for children, who are not fully developed physically and whose power of resistance is much less than that of the mature adults. Cotton mills have long been among the chief employers of children; even under the federal law there are nearly 30,000 children between 14 and 16 who are exposed to hazards inherent in this industry. The printing trade has long been considered dangerous from the health point of view because of exposure to lead dust and fumes which are likely to result in lead poisoning, but there are few states which class it as a hazardous occupation to be prohibited to boys under 16. New York is the only state which provides medical authority for ascertaining the effect of employment on the child's health, although a number of states require examination by a physician before granting work permits. Medical inspection of school children has attained a place of considerable prominence in our child welfare program, and the state is vitally concerned in the physical welfare of the children up to the time they go to work. A follow-up system providing medical supervision for our working children should be devised. The best plan would probably be to have a force of medical inspectors attached to the labor department working under the state board of health.—Child Labor Bulletin, VI-4, Feb. 1918. pp. 219-230. W. W. C.

TEAS, ELIZABETH M.: A REPORT OF A SURVEY OF THE CHILDREN IN THE UNGRADED CLASSES IN THE BOROUGH OF THE BRONX. There was a total registration of 411 children, 0.3 per cent of the public school population of the Bronx, in twenty-three ungraded classes for mentally defective children on April 1, 1917. It is estimated that at least 1.6 per cent, or 1661 of the 103,848 children on register in the schools of the Bronx are definitely feeble-minded. To meet this need it would be necessary to organize sixty additional ungraded classes. Sex distribution of the 361 children in the ungraded classes of the Bronx shows that 258, or

71.5 per cent, are boys and 103, or 28.5 per cent, are girls. The larger percentage of boys might be explained on the theory that females deviate less from the norm than males but there is less restraint among the boys, hence they are more apt to come into conflict with their school environment. Girls conform, and seem to show a greater willingness to persevere in spite of difficulties, with the result that the higher grades of mental defect are called slow and backward, and are not proposed by school officials for special school classification. A mental classification indicates that among 361 children there were no idiots, 189 imbeciles, 164 morons, and 8 doubtful cases. The median mental age was 7.6 years; the median chronological age was 12 years.—Ungraded, III-4, Jan. 1918. pp. 75-83. W. W. C.

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EXPERT TESTIMONY IN THE CASE OF ALBERTO FLORES

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Alberto Flores had been charged by the State of California with sexual assault and murder. The victim was a little Italian girl of six years. Alberto was a youth of nineteen or twenty years of age, of Spanish extraction with perhaps a strain of Indian in his blood. The deed was committed in the early evening of April 7, 1916, in the city of Santa Barbara.

The circumstances of the crime were as follows: The little girl was last seen by her father skipping a rope in the street in front of a store near her home. Then she went back of the store with two little boys to a garage to grease a little wagon. The two boys came back in a few minutes. About an hour later, when the girl did not appear, a search was begun by the police and neighbors. It lasted until after ten o'clock, when the body of the unfortunate child was found in an outbuilding, or kind of woodshed, in the rear of the store near which she had been playing. Life was extinct and the body, still warm, bore the unmistakable signs of violence and sexual assault. The doctors who performed the post mortem testified that although the vagina had been penetrated and torn, death was probably due to the combined effect of shock and suffocation.

Although Alberto was seen in town shortly after nine o'clock on the evening of the crime, he was not connected with it until he was arrested, on the 29th of June following, for assaulting a woman. On the day following his arrest, and after being plied with questions, he made a confession.

He said that about dark on the evening of April 7th he had seen the little girl skipping a rope in the street in front of her house and that he had picked her up in his arms and carried her to the shed

behind the store. He stated that he was with her only "about two minutes" and that he did not kill her. The child cried, "mama, mama," and to prevent her screaming he placed his hand over her mouth and held it there until she stopped. He insisted that he did not kill her but that he laid her on a sack of shavings in one room of the double shed. (Shavings were found in the child's hair). Then he sat down on a saw buck in one end of the shed and "took a dump." The fresh signs of human defecation had been found by the saw buck when the little girl was discovered. Thereupon he picked up the rope, intending, he said, to use it for his horse, but deciding it would be "no good" for this purpose he threw it away after he had walked a few blocks. (Alberto led the officers to the place where he said he had thrown the rope and it was found there). He said he "beat it home" then but that he soon came back, moved the child to the other room of the shed and put his finger "inside of her." He stated that he did nothing else. At this time he heard the voices of people, perhaps some of the searching party, outside the shed. He held the door closed with his shoulder until the people had left, then hurried to his horse and went home.

Horrible as the crime was, there seems to have been little difficulty in securing the confession, and after Alberto had told his story he asked if he might not go home. This, coupled with the act of defecation in the presence of the dead victim, shows how little Alberto appreciated the true nature of his crime. Some days later the confession was retracted, and when asked why he had said all those things he answered, "because they talked so fast"!

We need not concern ourselves about the retraction or about the theoretical value of a confession made by a person of Alberto's mentality. There were details in this confession which connected the defendant with the crime almost to the point of certainty.

Shortly before the trial, on December 8th and again on December the 12th, Alberto was given the Stanford-Binet intelligence test by a former Stanford student, Miss Emily O. Lamb, then a teacher in the schools of Santa Barbara. In each test Alberto earned a mental age of seven and a half years. The record blanks containing the verbatim responses were submitted to the writer, who returned the opinion that the case was one of definite mental deficiency. As a

result he was requested to go to Santa Barbara to examine the mentality of the defendant and to testify in court.

When the writer reached Santa Barbara the trial was in progress. The examination was made in the office of the jail on the morning of March 12th, 1917. It lasted for almost an hour and a half and was continued at two brief sittings on that and the following day. The result was as follows:

In **Year V**, Alberto passed all the tests except the alternative test of giving age. When asked how old he was he first said "eighteen," then, "no, nineteen, I forgot."

In **Year VI**, he distinguished right and left five out of six times and so passed the test. All the other tests of this group were passed except that of repeating 16-18 syllables, which he failed badly.

In **Year VII** he gave the number of figures, tied the bow knot, gave differences between fly and butterfly, stone and egg, wood and glass, copied the diamond successfully three times, and repeated three digits backwards; but he failed in description of pictures, naming the days of the week, and repeating five digits forwards.

In **Year VIII** he passed the ball and field test (inferior plan), named the six coins, and answered two of the three comprehension questions. He failed on all the items of the similarities test, giving nothing but differences. Only one word was defined in terms superior to use. In counting backward from 20 went to 16 correctly, then back to 17, then said he could not do it. After repeated urging he was persuaded to begin at 10 and gave, "10, 9, 8, 7, 6, 4, 5, 10, 9,—no—I can't." Told to try again he went from 10 to 1 with but one error, the omission of 3. The ball and field performance was secured only after repeated urging. "There aint no ball there," Alberto several times insisted. In the vocabulary test only 11 words were defined instead of the 20 required for a pass at this level. Alberto's English vocabulary is about a year and a half below his general mental level, a discrepancy which is accounted for by the fact that he also speaks Spanish. Even so, it is low; for Alberto had spoken English from early childhood and had attended an American school from the age of five to about fourteen years.

In **Year IX** three tests were passed, giving date, arranging weights, (two successes out of three), and repeating four digits in reverse

order, (one success in three trials). In making change for four cents out of 10 Alberto would give two cents back; for 12 cents out of 15, 7 cents; for 4 cents out of 25, "no change."

In the three word test:

- (a) Boy, river, ball—"the boy went to the river;"
- (b) Work, money, men—"I can't get that;"
- (c) Desert, rivers, lakes—"no—can't" (urged) "can't" (urged again) "The river in the desert."

Giving rimes:

- (a) Day—"Done, doing" (1 minute)
- (b) Mill—"Mail, mile, may" (1 minute)
- (c) Spring—"Don't know that one."

Naming months: "Let's see—April, June, July, August, September October, November." (Is that all?) "It's a year."

In **Year X** the only success was in drawing the two designs from memory. The little news passage which is ordinarily read by fourth grade children in 20 seconds, required 57 seconds, and only three "memories" were given. Each of the comprehension questions brought only the response "That's too hard for me." The test of naming 60 words brought 52 words, distributed as follows in the successive half minutes: 18, 9, 10, 3, 8, 4. The absurdities test brought only such responses as "I don't see nothing foolish in that," "That's pretty hard," "I suppose he never killed any" (railroad accident). Six digits and the sentences of 20-22 syllables were also failed.

In **Years XII** and **XIV** there was no semblance of success on any item of any test.

Summarizing, and disregarding alternative tests, we have:

To year IV	4 years
To year V	12 months
To year VI	10 months
To year VII	8 months
To year VIII	4 months
To year IX	6 months
To year X	2 months
Total	4 years 42 months
or	7 years 6 months

This was exactly the score earned on each of the two tests which had already been given by Miss Lamb. The performances on the in-

dividual tests in the different examinations were not exactly the same, but the variations were slight and counterbalancing.

On the Yerkes-Bridges Point Scale the credit earned was 43 points, or approximately eight years, according to the Yerkes-Bridges norms.

There was no evidence of insanity, of a mind once sound but deteriorated. Alberto had always been inferior, as shown by the fact that he had only reached the third grade when he left school at the age of fourteen or fifteen. After leaving school he had worked, sometimes at odd jobs, sometimes on the ranch, occasionally with a gang of road laborers. A woman for whom he had done garden work testified that he required constant supervision and showed marked "incapacity to understand orders or to obey them." The following incident, related on the witness stand, sufficiently illustrates his childish mentality. The above mentioned woman, after Alberto had worked for her a while in the garden, asked him how much she owed him. "About four dollars," said Alberto. "Nonsense," the woman said, "I'll give you fifty cents." "All right" was the answer.

Alberto's family history was not learned in full, but it is said to contain much that would help to account for the boy's mental condition. The mother, tested by Miss Lamb, graded at about 10 by the Stanford Revision. The father appeared normal but inferior. One brother of Alberto was certainly normal, but it is said that he presents a marked contrast to most of the other seventeen children of the family.

Apart from the family history there was evidence enough of Alberto's mental deficiency. There was no question whatever of shamming, and the fact that Spanish was the language commonly employed in the home, cannot, in the face of Alberto's long attendance at school¹, be seriously considered as accounting for more than one or two minor failures in the test. It is safe to say that no competent psychologist would diagnose the case as anything else than one of pronounced mental deficiency.

Thus far there is nothing of exceptional interest about the case. There are countless individuals of equally low mentality, many of whom habitually commit criminal acts. Even such horrible offenses

1. The father testified Alberto had attended school from the time he was about five years of age until about four years prior to the trial.

as that of which Alberto stood accused are by no means uncommon. The fact which made this case of unusual interest from the psychological point of view was the determined effort which was made by the prosecution to convince the jury that the accused was of normal mentality. Let us examine the "expert" testimony which was offered for this purpose.

First, a word regarding the testimony of the writer, which preceded that of the special witness for the prosecution. Although it consumed nearly a day and a half of the trial it need not be rehearsed here in detail, since the reader is already acquainted with the results of the test on which the testimony was based. After extended questioning by the counsel for defense for the purpose of showing the experience of the witness with mental defectives, and after the gross result of the mental examination had been stated, the hypothetical question was put: "If—(stating time and place of crime) the defendant, Alberto Flores, seized in his arms a female child of the age of six years,—etc., (stating in full the details of the crime for which defendant was on trial). —Assuming those facts, for the purpose of this question, state whether the defendant was conscious of the wrongful nature of the act and did not know that it was wrong and criminal." (Objection on the ground that the witness was not a graduate of a medical school. Objection sustained. Argument. Objection finally withdrawn and the question was restated). Answer—"I would say he was conscious of the criminality of the act to the extent to which a child of seven and a half years would be conscious of the criminality. (Motion by prosecution to strike out answer as not responsive to question. Motion granted and direct answer called for). Answer—"I would say no."

The cross examination was directed chiefly to four ends:

- (1) To convince the jury that an opinion based upon only two or three hours with the defendant could have no value;
- (2) That the Binet tests are valid only with school children;
- (3) That even if valid for adults, their use in this case would be misleading because of the possibility of shamming, the abnormal mental condition of the defendant when tested (during trial), and the fact that Spanish is the language of his home;
- (4) To make the successful test responses of the defendant ap-

pear more intelligent than they were and the failures insignificant or trivial.

The method of attaining the last named purpose was particularly clever. It will be recalled that below Year VIII the subject succeeded with all but three tests, that in VIII and IX the successes rapidly diminished, and that above IX only a single test was passed. The method of the cross examination was by elaborate questioning to throw into relief the successful responses of the defendant in the tests as far as the end of Year VII. This was drawn out to last until court recess. After recess, instead of continuing the cross examination on the tests of VIII, IX, and X, where the failures would have had a telling effect, the counsel for prosecution skipped to the tests of Year XII. Here it was easier to condone the failures by making the tests appear unfair, too hard, or schoolish. The fact that the tests above XIV were not given was seized upon to make it appear that the subject had not been given an opportunity to show the normality of his intelligence.

Our present purpose, however, is to examine the expert testimony of the prosecution. This was furnished by two witnesses, physicians, both of whom rendered the opinion that the defendant was of normal mentality. The testimony of one was brief and was made little of. Main reliance was placed in the testimony of one Dr. ———, a "specialist in mental diseases" who had had the defendant under observation since the time of his arrest some eight months previously. Some of the testimony given by this physician is so remarkable, from the psychological point of view, that it is deemed worthy of summary and comment.

Dr. ——— stated that his medical studies began at Yale University in 1896 and that they were continued in the University of Melbourne, Australia, again at Yale, later in London at the St. Thomas Hospital, the Bethlehem Hospital for the Insane, the Earlswood Hospital for the Insane, and the Queen's Square Hospital for the Feeble-Minded, and "in various jails and in the ordinary practice of medicine in India." After that he studied in Columbian University, in Washington, at St. Elizabeth's Hospital for the Insane in Washington, at the Government Hospital for the Insane, and once more in Yale University and the Connecticut State Asylum for the Insane at Middletown, Con-

necticut. Since that time he had been engaged in the general practice of his profession in various places in various states.

The doctor's training and experience seem to have been sufficiently varied and extensive, but the writer could not undertake to say how the value of his opinion in this case would compare with that of the average physician. The following excerpts from his testimony include practically all the statements made by him bearing upon his reasons for judging the defendant to be of normal mentality. Special attention is called to the nature of the responses here described as symptomatic of normal intelligence.

Interview July 1st. . . . "I told him I had come to hear what he had to say and to look him over and report on his mental condition. . . . He spoke clearly and at good speed. . . . He told me that his age was eighteen; his home was Santa Barbara; that he had always lived there; that his father and mother were both living and that he had three brothers and two sisters. He said that he was taller than his brothers but that his brother was older. He said that his two sisters were smaller than he was. . . . He said that he worked for his father on the ranch in Sycamore Canyon and grew hay up on the side hill. . . . He said he worked for a man named Tapie. . . . Worked for him until about two or three months ago. . . . That he was paid by the month and was paid by check. . . . He said that he endorsed the check (wrote his name on the back of it). I asked him why. . . . He said because if he did not they would not give him the money. . . . I asked him when he had been arrested. He said he had been arrested on Thursday evening, . . . and brought to the jail Friday evening. He said that that was Saturday and that tomorrow would be Sunday. That statement was correct. . . . He said that he had not done anything to the little girl. He said that he had admitted that he had, but that was because they had asked him so fast." . . .

Q. "Have you been here every day of the trial?"

A. "On every day."

Q. "During these examinations did you employ any memory test to test his memory?"

A. "I did on several occasions."

Q. "What other test did you make?"

A. "I made any test that I could think of and which seemed appropriate at the time. I talked with him; had long conversations with him and checked up how he answered my questions. At subsequent visits I would repeat those questions and see if he gave the same answers. . . . I asked him if he had everything he wanted. He said he would like to have some money for sugar to put in his coffee. He expected his father to be in that afternoon and when he came he would ask him for it and that his father would give him the money. I said I would go, and he picked up a paper. When he came to a picture of Uncle Sam I asked him what it was. He said it was a picture of Uncle Sam. . . . He mentioned some of the things we had talked about in a previous conversation. . . . He talked more freely about his family. . . . He said that he wanted some more sugar; expected that his brothers would bring it to him. He volunteered that statement. I asked him as to any injury he had received and he said that when he was small he had been kicked by a horse, and showed me the scar on his left cheek. I asked him if he had any doctor and he said no."

Interview July 5th. . . . "He put out his hand and shook hands with me when he saw me. The duration of this visit was about fifty minutes. I questioned him on the matter which he had told me about. He gave me some more data concerning it. He gave it the same as he had before. . . . He told me that he read the newspapers². I asked him if his people took a newspaper and he said no; that they got old newspapers sometimes; that he read them; that a neighbor sometimes gave him papers. I asked him the name of that neighbor and he said James Richardson. He said he wanted to have some more sugar, that he was all out of sugar and that he wished he could be allowed to go outside to work as other prisoners do.

"I returned later that evening . . . I wished someone to ask him questions while I observed his pulse rate. . . . His pulse before the questioning, while he was sitting at rest in the chair, was at the rate of 72; when he was questioned on what I should call ordinary questions of conversation, and under the stimulus, his pulse rate went

2. One wonders whether the doctor was acquainted with the fact that institutions for the feeble-minded are furnished library facilities and newspapers for their higher grade inmates.

up to 84 and 95,—varied. The district attorney asked him about certain matters which were not matters of ordinary conversation and which might concern him very closely, and under that questioning his pulse rate went up to 120. He asked if his telling the truth would mean that he could go free, and when the district attorney explained to him that it would not, his pulse rate again went up to 120.³ . . .

"I showed him a ticket—my return bus ticket to Montecito. I asked him if he knew what it was, and he told me what it was. I asked him where the busses ran to,—where they started from and where they go to. He told me. . . . He said if he took a jitney to come in it would cost him 75 cents from Sycamore Canyon".⁴

Interview July 8. . . . "I went to his cell. He recognized me and came to the cell without being called. He was standing up talking through the bars and I told him to sit down. He sat down.⁵ He began by volunteering the statement that he had nothing to say. I said, 'in regard to what,' (Alberto told what). This showed his memory of the previous conversation. . . . I tested his memory and the acute appreciation of his surrounding. I purposely spoke of his sentence being of six weeks' duration. He corrected me and said it was six months. I again asked him what day he had been arrested. It was a week since the previous time that I had asked him the question, ten days since the time of his arrest. He stated that he had been brought to jail on Friday. I asked him if he had got his sugar yet. He said he had not, but today was Saturday and he expected his brother would come in about three o'clock and he asked me if it was three o'clock then. . . . The other prisoners were making preparations for being shaved. . . . He said that he would soon have to shave, and pointed to his mustache. I asked him how often he shaved. He said not as often as once a week."

Interview July 11. . . . "He was in his cell and he was storing away in a box in a corner some cans of preserved meat and sar-

3. It was brought out by cross-examination that the pulse counts had not been recorded until after the interview, perhaps a half hour after they were made.

4. The reader is referred to year III, test 2, of the Stanford Revision for test of naming familiar objects.

5. Compare Stanford Revision, year III, test 1; also year V, test of three commissions.

dines. . . . He told me his brother had brought him these things to eat. I asked him if he had remembered to ask his brother for tobacco, and he said yes.”

Interview July 12th. . . . “He said that he had only two tins of meat left and one tin of sardines; that he had eaten one tin of meat and two of sardines; that his brother had brought him three of each. I had counted the tins the previous day and had seen three tins of each.”⁶

Interview July 14th. “He was in another cell playing cards. I did not call for him. I went around to his cell, looked in and he greeted me. I stayed fifteen minutes watching him. I asked him if he played the game and he said he did not play this game, but that he knew another game of cards. He watched this game and several times he made remarks on it. This game that was being played was a fairly intricate game of solitaire known as Devil’s Patience. It consists of dealing off thirteen cards from the pack.⁷ . . . You lay to the side the cards, face downward; four cards are dealt and then the cards are dealt in threes. . . . The object of the game is to build downward. Several times during this game he asked questions of the persons playing, pointing out things. One time when the man who was playing the game had dealt out his thirteen cards from the pack, Flores asked him if he had dealt thirteen cards into the pack. When the man would turn up a 3 and look at it, Flores would point to one of the four cards where it would go. . . . He did it three or four times. When the player had very few cards left in his hand and looked as if he would complete the solitaire, Flores would encourage him by words, and when the man failed to get out Flores would show disappointment.”

Interview July 19th. . . . “I asked him where the card player was today. He said that the card player had changed his cell; before he had been in one of the middle cells. I asked him if he could do that. He said he had to get permission to change it. . . . I asked him if he could not do just as he liked and he said no. . . . I asked him what day it was. He answered correctly that it was Wednesday. . . .

6. See Stanford Revision, year IV, for test of counting four pennies.

7. See Stanford Revision, year VI, for test of counting thirteen pennies.

"I asked him about the neighbors; what ranches bordered his father's ranch. He said that the Palmer was one that was close to his. I asked him whether the Palmer ranch was above or below Mountain Drive and he said it was below. I asked him if it had any house on it and he said it had. . . . He said it was rented to Italians. I asked him how long they had been there and he said he thought they had been there about two years. I asked him when they would serve his supper. He said that they would serve it about five o'clock.⁸ I asked him what it would be and he said it was beans and rice and bread with tea or coffee."

Interview February 22, 1917. "I told the jailer that I did not wish him to announce me to the prisoner, that I wished to see whether the prisoner would remember and recognize me. (It had been seven months since the doctor's last visit.) . . . Flores came over. Seeing me he smiled and put out his hand. I asked him, Do you know who I am? He said, Yes, you are a doctor, I forget your name. . . . I asked him when he had seen me last and he said it must be four or five months. . . . I asked him how often they (his parents) visited him and he said that some of them generally visited him twice a week. I said The jail has been painted, hasn't it? He looked around and put out his hand and said yes. I said, How long ago was it painted? He said a long time ago. The paint was quite dry. . . . He took up a magazine off the bench and I looked at it. It had a name written on it. I said, Whose name is that? He said, That man's name, and pointed toward the bunk on which the other man had been sitting. . . . I asked him if he played cards. He said he played some but would rather watch other people play. . . . I said, Is that name on the magazine yours? He said it was not his name. He said good-bye to me when I said I must be going. His speech was without hesitation. . . .

"He complained that it was cold in the office. . . . It was cold, a great deal colder than in the jail. . . . "I asked him to put out his tongue and he put it out promptly. There was no deflection noticed; no deformity of the mouth noticed. He was told to open his mouth. There was no deformity of the teeth, palate, tonsils or tongue noticed. I felt all over his head for scars and found no ab-

8. Compare test of distinguishing forenoon and afternoon.

normality. I asked him if he had any pain in any part of his head. . . . He said no. . . . I made him stand up. . . . He was told to take a deep breath; he did so at once. He was told to let it go. He did so. He was told to take another and hold it. He did so. I told him to resume his seat and he did so.

"I asked him what was the character of the work he did for his father. He said he worked around the house; worked at plowing and the like. I asked him how long he worked in the day and he said sometimes he worked as long as eight hours. . . . I asked him how many horses he plowed with and he said he plowed with two horses. I asked him the color of them and he said they were black.⁹ I asked how long his father had had them and he said he didn't know. . . . I asked him if he remembered how much he used to pay his father for his board and he said he didn't remember.

"I talked about the jail to him and about the food. . . . His pulse was running 84 at that time. I asked him if he remembered the conversation the district attorney and myself had with him and his pulse at once went up to 120 and over. To all my questions regarding this conversation he said he did not remember. . . .

(Regarding card game). "I was asking him to ascertain his memory of the pack,—whether he could remember it without having a pack in front of him. I said, What card comes after the Queen? He said, The Jack. I said, What card comes next to six? He said, To the six? The eight. I said, What card comes next to five? He said, I don't know. . . .

"He said between half past one and three all the prisoners remained in their cells quiet, but at other times they would walk up and down the corridor. I asked him why, and he said it was the rule. I asked him how many men were in the jail, and he said about twenty-one."¹⁰

Interview March 2, 1917. . . . "On this occasion I put him through some intelligence tests. I had brought with me a magazine and I turned through various pages; showed him some of the pictures; for example, I turned to a picture (representing cows in a building with a patent stanchion) and I asked him Do you know what this is?

9. See recognition of colors, year V of Stanford Revision.

10. See counting backward from 20 to 1, year VIII.

He said, Sure, a dairy.¹¹ I asked him if he had any cows at home and he said that they had some, a few. . . . I showed him a picture of a man mowing; two men shown in the picture and a tractor is pulling the mower. I asked him what it was and he said it was a man plowing. I said look again. He said, No, it is a man cutting grass. I asked him if he had ever cut grass and he said yes. . . . I showed him an advertisement which contained in large letters the figures \$10.00. I asked him what that was and he said a thousand. I said, Look again. He said, Ten dollars. . . . I asked him what the dollar sign meant, pointing to the sign and said, What does this mean? He said, Dollars. . . . I asked him what the map was (showing him a map). He looked at it carefully—Europe he said, it is a map of Europe, and his answer was correct. . . . I showed him a series of pictures which were labeled, The French Army Commissary Department. I asked him what the picture was. He said Soldiers. . . .

At various times during these visits I made upon this man Flores some other tests; some tests to show his knowledge of moral responsibility, or his relationship to other people and his estimate of his ethical obligation to others. I suggested to him a suppositious offense. I said, Suppose a negro committed a crime upon a little girl, and as a result of that the little girl died. What ought to be done with him? . . . His answer was that he ought to be out in jail for one hundred years, and fed on bread and water. . . .

"I went into his understanding of the relationship between a man and a prostitute so I could compare it with his understanding of an assault upon a small girl. He was asked what a man who went with a prostitute would pay her. He said a dollar and a half. . . .

"One evening at about five P. M. he was sitting in his cell and the jail attendants were passing the trays of food. Two other men were sharing his cell with him. Three pans of beans and rice were passed in through the window to Flores. Flores arranged the pans in a row on the bed at some distance apart. I said, What have you got three pans for, they are giving you a lot to eat tonight. He said, These two are not mine. I asked him to whom the others belonged and he said they belonged to the other two men. Some salt was passed in and he salted the bean end of the pan and did not salt the rice. He put the

11. See description of pictures, year VII.

salt back. I said, Why are you only salting one pan? He said, These other two don't belong to me. I said, Why don't you salt them? He said They wouldn't like it."

Q. "Doctor, are you familiar with any of the systems in use for testing the mental development of people?"

A. "I am. I am familiar with the system that is used in the Federal Hospital for the insane in Washington. . . . Then I am familiar with the Binet-Simon test and various modifications of these tests. . . . The Ebbinghaus test, which was the original of the Binet-Simon test; that is, the Binet-Simon test is the development of the Ebbinghaus test. There are a great many of these tests."

Q. "Are these tests (Binet-Simon) suitable for determining the degree of the mental development of an individual?" . . .

A. "They will classify school children probably as well as any other system there is to fit them into those classes, but they have no test for anything outside of school work, and they depend entirely upon the good faith of the person who is being tested." . . .

Q. "State to what extent he (Flores) has developed mentally, comparing him to a normal person."

A. "Comparing him to a normal person living in such a family, living in such a house, living in such a location, having had a small term of education and no more than this boy has had, I would say that he is within two or three years either way of the normal for that style of person. In some way he might exceed it and in others he would fall deficient."

Q. "Assuming for the purpose of this question, that his age is approximately 18½ years, then would you say that he has about the intelligence of a 16 or 16½ year old normal person?"

A. "Yes."

Q. "Do you think that he was at that time able to employ the abstract ideas of justice and right and wrong and law in relation to this act?"

A. "I do."

Q. "Do you think the defendant could abstract ideas in forming a conception?"

A. "He did in many of his conversations with me."

Q. "In reference to these dishes, these different trays of food

that were handed out, do you think it took any knowledge of abstract ideas of right and wrong for him to take only his own plate?"

A. "Certainly, because the owners of these two plates were in the abstract at that time; that is, they were not in the cell at the time; he had to consider something that was not there."

Q. "I will ask you to state whether the defendant on April 7, 1916, was sane or insane?"

A. "Sane."

Q. "Did he know the nature and quality of the act he was doing when he committed the act upon the body of that child?"

A. "He did."

CROSS EXAMINATION

The doctor's method of arriving at an opinion regarding the defendant's intelligence was further brought out in the cross examination.

Q. "These questions that you have given him; that is, this data that you have presented here as justifying your opinion, is that data of such a nature that it can be used by any person of your training in coming to a conclusion if this data is presented to him? In other words, is it standardized?"

A. "Yes. There is a great deal that does not require any training at all,—only common sense."

Q. "Has this system any name, doctor?"

A. "It has a great many names."

Q. "What name do you apply?"

A. "I take a little from one system and a little from another. It is being changed all the time. It is modeled on the Ebbinghaus system which was, I think, brought out and published about 1901, and then the revisions of that were collected and revised by Binet, I think in 1911. Since then there have been revisions by others."

Q. "Are you acquainted with the Binet test of 1908 and that of 1905?"

A. "I haven't carried it in my mind at present."

Q. "Did you know there are two forms of that test?"

A. "There have been many forms of it."

Q. "Do you know the difference between that of 1905 and that of 1908?"

A. "I don't know what the difference is; no."

Q. "Do you know what Binet was by profession?"

A. "No; I have heard but I have forgotten that. It was of no significance; it had no reference to the value of the test." . . .

Q. "Are you familiar with the Yerkes-Bridges Intelligence Scale?"

A. "To some extent."

Q. "Can you explain the method by which that scale was devised?"

A. "No; I cannot explain that. I have not studied the arrangement of all these scales. I happen to know the Binet-Simon scale because of the controversy over it some years ago in the medical journals." . . .

Q. "Are not these tests generally based upon what is known as the intelligence quotient?"

A. "I don't know what you mean by that. I have not heard the phrase before." . . .

Q. "Doctor, can you name me one leading authority on feeble-mindedness which you studied in England?"

A. "I should be very sorry to name one leading authority. There are a great many authorities." . . .

Q. "Have you never heard of Tredgold?"

A. "I have never heard of him."

The cross examination was very searching and brought out, often in an amusing way, the insignificance of some of the symptoms of intelligence which had been emphasized by the witness, for example:

That it is not unusual for a five year old child to know his age.

That six year olds can usually tell whether they have brothers and sisters; whether these are older or younger, larger or smaller, etc.;

That often a little child will shake hands, sit, stand, put out its tongue at command, etc.;

That it does not take much intelligence to know when the room is cold;

That common colors are generally recognized by children of five

or six years, and that the test of describing pictures has been definitely standardized at seven years;

That anyone of seven year old mentality should be able to state where he lived, for whom he had worked, and what road he takes to go to town;

That any seven year old child can tell where he attends school;

That it does not take much more intelligence than a baby has to recognize an individual who calls two or three times a week;

That Alberto's frequent requests for sugar were on a par with a child's begging for candy;

That six year olds can ordinarily count to thirteen as shown by the Binet test, (it will be remembered that Alberto could deal off thirteen cards);

That a research of Dr. Kuhlmann's shows that feeble-minded children are capable of learning to play dominoes;

That Alberto's hiding away his cans of food might be interpreted as on a par with a dog's hiding a bone;

That giving the number of cans of food which remained did not necessarily involve anything more than counting of numbers below four;—a test which has been standardized at four years;

That Alberto's denial of his crime did not necessarily imply any more ethical discrimination of right and wrong than would be shown by a child who denied stealing jam;

That to know he could not change his cell without permission, involved nothing more than the sense of restraint which any child would feel under similar conditions;

That the identification of familiar objects (Alberto identified bus ticket), is easy at three or four years intelligence;

That to know he must write his name on the back of a check in order to get his money, involves no mental process which would be beyond the average seven year child;

That even the knowledge that his sentence was six months instead of six weeks is not indicative of any high degree of mentality, etc., etc.

We will remind the reader that according to three different tests Alberto could not name the days of the week, count from 20 to 1; make change for such small sums as 4 cents out of 10 cents, or 12 cents

out of 15 cents; could not name the months; make a statement containing three given words; or see through a single one of the absurdities. As shown by additional and repeated tests, he could not tell the time closer than the nearest five minutes.

Surely we have seen no better illustration of the usefulness of standard norms in grading intelligence performances.

If the sort of testimony we have reviewed seems absurd, let it be remembered that it was the usual thing before the Binet scale came into existence, and that it is even yet by no means uncommon. Indeed, when given by a physician, such testimony is often much more readily accepted by a jury than is the testimony of a qualified psychologist. In this case, however, I am informed that the jury was unanimous in the belief that Alberto was really a child in intelligence. They were convinced of his guilt but could not see their way to pass a sentence of capital punishment upon a person with this degree of responsibility. Alberto was accordingly sentenced to prison for life.

Had the writer been a member of the jury this verdict would still have been unanimous. Society could not afford to take the risk of having Alberto at large, and the laws of California were such that permanent restraint in an institution for the feeble-minded could not be imposed against the wishes of the parents.

Listening to a trial like that of Alberto Flores one feels that the criminal court is a walled castle stoutly defended against the inroads of science or enlightened thought. It is living in a pre-scientific age. It knows nothing of biology, medicine or heredity. Its psychology is that of the 18th century. It has not learned of the existence of feeble-mindedness in any other form than that of helpless idiocy.

In the present case, counsel for the defense offered to the Court instruction to the effect that mental incapacity may result from feeble-mindedness as well as from the mental conditions suggested in the penal code, to-wit: insanity, lunacy, and idiocy. The instruction was refused.

Mr. Francis Price, the lawyer who conducted the defense of Alberto, wrote as follows on the date of March 1st, 1918:

"Within the past month there was sentenced to San Quentin one Antonio L., first cousin of Alberto F., and one of seventeen children in a single family. Antonio is only nineteen years old but has confessed to committing two different sexual assaults upon women, a burglary, and a highway robbery, in-

volving also a sexual assault. His intelligence is far above that of Alberto but he seemed entirely ignorant of the serious nature of his acts. I was however obliged to insist upon his being sentenced to prison because he is too dangerous a man to be at large and we have no adequate provision for his confinement out of prison."

By an act which went into effect July 1, 1917, the situation in California as regards the legal status of feeble-mindedness was, however, much improved. It provides a definition of feeble-mindedness in accordance with psychological standards and places feeble-mindedness upon the same basis as insanity and inebriety in so far as *ex parte* proceedings to secure the confinement of an afflicted person are concerned. It goes further and provides as follows: "If on conviction of any person of crime by any court it appears to the court that such person is feeble-minded . . . the court may adjourn proceedings, or suspend sentence, as the case may be, and direct some suitable person to take proceedings under this act against the person before the court", etc.

A PRELIMINARY STUDY OF POTENTIAL DELINQUENCY

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Purpose of the study. In recent studies of the problem of juvenile delinquency a great deal of attention has been given to personal history studies which have furnished much valuable information on which to base deductions concerning the characteristics and traits of the individuals studied. Groups of such personal histories have permitted statistical study of the group known as delinquent. The fundamental object of research work in this field is recognized to be an attempt to find and analyze causes that lead to the delinquent acts. This brief study is designed to call to attention the possibility of facing the problem a step nearer the source of trouble. The writer had expected during the present year to develop a more complete and thorough study of the nature of potential delinquency. At this time, however, it will be necessary to confine the consideration to a brief survey of certain conditions that are found to exist in the grades of the public school system below the high school. The attempt will be made to present a few outstanding facts which are suggestive of the wealth of material that might be reached in a more thorough analysis and of the possibilities of the use of such investigations as assisting in the initiation and carrying through of a program of preventive work administered on a scientific basis in the public school system.

Sources of data. The statistical material presented was obtained from two studies, one already complete, the other now in the course of development. The survey of exceptional children in the schools of Santa Ana, California,² devotes three pages to the discussion of conduct under three heads; (1) superior, well-behaved pupils; (2) aver-

1. To Dr. J. Harold Williams, Director of Research, Whittier State School, is due the appreciation of the writer for the suggestion of presenting this material in a preliminary form and for assistance in formulating the outline of study.

2. Williams, J. Harold: *Exceptional Children in the Schools of Santa Ana, California*. A Survey by the Research Staff of Whittier State School. Publications of Whittier State School, Research Bulletin No. 6. Whittier, California, Jan. 1918. pp. 40.

age; (3) troublesome. Under the third head were included 161 pupils, or 8.7 per cent of the school population (of 1855 pupils) who were reported as "troublesome" by the teachers. In speaking of these cases the report states: "The behavior of these 'troublesome' cases varies from almost average conduct to incorrigibility. . . . Such children may be considered **potentially delinquent**. Probably not less than 100 (and probably more) of the 'troublesome' boys and girls in the Santa Ana schools . . . are repeating the history of boys and girls who are now wards of the state in public institutions." The more detailed data available concerning these 161 children will be presented and discussed under the head "Santa Ana Selected".

Some additional data were obtained from material being studied in the graduate School of Education of Stanford University.³ Material was selected from the reports of four teachers of the Redwood City elementary schools, grades five to eight. The reports include estimates of five character traits: (1) attention, (2) conscientiousness, (3) co-operation, (4) obedience, and (5) quarrelsomeness. For each pupil these traits were graded on a scale of seven, score 4 representing the teacher's idea of "average", and scores 1 and 7 indicating the most and the least desirable conditions respectively. The selection was made by including in the tabulations all pupils having a score of five or lower in any one of the characteristics. In this way 35 pupils representing a school population of approximately 160 were selected. This group will be known as "Redwood City Selected".

For comparative control material the data presented in the Santa Ana survey concerning the entire school population are used. This is believed to be typical of average public school systems in the smaller cities of California.

Discussion of the data: Conduct. Table I gives the tabulation of the reports concerning the conduct of the Santa Ana selected group. The teachers were asked to indicate which children should be designated as "troublesome" and when possible note any definite offenses which these children were known to have committed. Of this group

3. Mr. Lowry S. Howard, graduate student in education, is to be credited with obtaining the data by questionnaire from the superintendent and teachers of the Central Grammar School of Redwood City, California.

TABLE I. CONDUCT. REPORTS ON 161 CHILDREN IN THE SANTA ANA SCHOOLS.

	No.	Per Cent.
Troublesome	121	75.1
Lie	21	13.4
Immoral	13	8.1
Steal	12	7.5
Truants	9	5.6

121 or 75.1 per cent were indicated as troublesome with no other definite record given. From one to four other more definite offenses were recorded for each of the 40 remaining children in the proportions shown in the table. Then 24.9 per cent of this group are credited with conduct which is identical with that which is reported in the earlier school history of the boys committed by the juvenile court to the state industrial schools. The large number, 75.1 per cent, who are reported as "troublesome" doubtless may also show sooner or later more definite unsocial behavior. It is to be noted that in the more selected population of Whittier State School stealing, in its various forms, leads in frequency as a principal offense, with truancy and sex offenses following in less frequent occurrence. In the public schools the more serious offenses are predicted, so to speak, by the comparatively minor dishonesties.

TABLE II. CHARACTER TRAITS OF 35 CHILDREN IN THE REDWOOD CITY SCHOOLS.

	V. Sup.	Sup.	Good	Av.	Bkw'd.	Inf.	V. Inf.
Attention	13	17*	5	.....
Conscientiousness	1	15	17*	1	1
Cooperation	1	1	25*	7	1	.....
Obedience	3	21*	11	.....	.....
Quarrelsomeness	22*	13	.....	.....

*Median.

Table II shows the distribution of the teachers' estimates in the Redwood City selected group in regard to the five character traits. This shows for attention and conscientiousness the median for the group falling below the "average". For the other three traits the median falls in the average group but the distribution is definitely skewed toward the less desirable end of the distribution. Q^2 in each

trait falls in the same group as the median whereas Q^3 falls in the group below.

Taking the two selected groups together we find a distribution of more or less serious unsocial conduct whose average is below that of the average school population. This is a condition between the average population and the population of Whittier State School. The average of the total population could be definitely improved if by preventive means the conduct of these "potentials" could be socialized or if, in the cases of incorrigibles, the individuals and their influence be removed from the schools to some adequate and better adapted supervision.

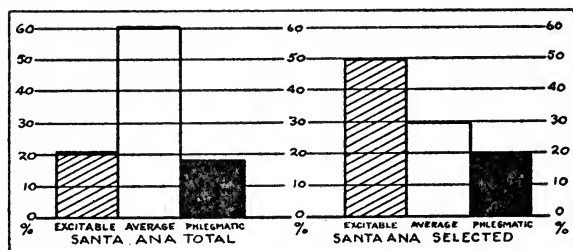


Fig. 1. Distribution of prevailing temperamental states of potentially delinquent children, compared with the total school population in the same city.

Temperament. The teachers of Santa Ana were asked to group their pupils into three classifications as regards temperament. The total population was found to be fairly symmetrically distributed in the three groups of excitable, average and phlegmatic as shown in Table III. The standard deviation (central two-thirds of the group) includes almost exclusively the average class with very even division of the remainder between the two extreme groups. The selected unsocial groups, however, present a different appearance. Here we find a great increase in the proportion of excitable cases at the expense of

TABLE III. ESTIMATES OF PREVAILING TEMPERAMENTAL STATES OF SANTA ANA SCHOOL CHILDREN.

Group	Total	Per cent	Selected	Per cent
Excitable	406	21.5	81	50.3
Average	1175	61.6	49	30.4
Phlegmatic	329	16.9	31	19.3
Total	1910	100.0	161	100.0

a retardation in proportion of average individuals. A barely noticeable increase occurs in the percentage of phlegmatic children. Is not this increase in temperamental excitability a factor to be further studied in a complete analysis of potential delinquency?

TABLE IV. TEACHERS' ESTIMATES OF INTELLIGENCE, SANTA ANA AND REDWOOD CITY SCHOOLS

	Total	Santa Ana		Redwood City		Total	
		%	Selected	%	Selected	%	Selected
Superior	166	8.8	3	1.8	0	0	3
Average	1185	63.2	54	33.5	12	34.3	66
Backward	413	22.0	79	49.0	11	31.4	90
Inferior	90	4.8	21	13.3	10	28.6	31
Very Inf.	23	1.2	4	2.4	2	5.7	6
Total	1877	100.0	161	100.0	35	100.0	196

Intelligence. Comparative material regarding the intelligence of the groups here considered is furnished by the teachers' estimates of intelligence obtained for each of the three groups under consideration. As no uniform test was given to all of the groups alike, no really standardized data are available. The uniformity of method prescribed for the use of the teachers in all the cases gives, then, a good basis for comparison if not an absolute standard for estimating the average intelligence of the various groups. Table IV presents the numbers and percentages by intelligence groups. In the classification as given in Santa Ana but six groups were used, one above the average, known as "superior" and the four below. In presenting the material for the survey report the two lowest groups were combined giving a five-fold classification. The Redwood City data were given in a symmetrical seven-group method, three above and three below the average group. This material was easily converted to conform with the Santa Ana tables by confining all groups above the average into one group called "Superior". Fig. 2 permits of graphical comparison of the various groups one with the other. There is also added the diagram showing the intelligence distribution at Whittier State School. It should be noted that this last graph is based on the results of Stanford Revision Binet tests and so is a presentation of absolute groups of definitely measured mental levels. Hence the other groups are only roughly comparable to this classification.

The most striking feature of the comparison between the Santa

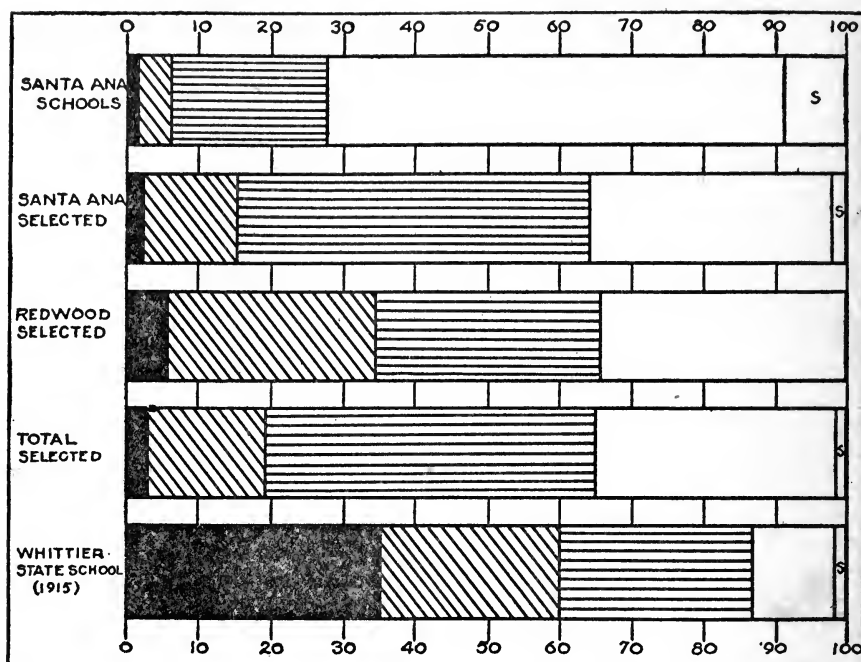


Fig. 2 Distribution of intelligence in the public schools of two cities, in comparison with groups of selected delinquent and potentially delinquent children. Areas, left to right represent percentages of feeble-minded, borderline, dull-normal, average-normal, and superior, respectively.

Ana totals, the total selected and the Whittier delinquent groups, is the continuous increase in the proportions of the very inferior or defective groups, also of the two intermediate retarded classes, as the selection by conduct increases. Parallel with this there is the decrease in the percentages of the two upper groups. Apparently to a great extent unsocial conduct and weak mental ability go hand in hand (or head in head). From the point of view of the potential delinquency problem the position of the selected group is notable. The selection of the troublesome cases involves a full doubling of the proportions of the very inferior, and the two next higher group; the percentage of average and superior combined is reduced one-half. Possibly equally significant is the further selective step from the selected group to the delinquent group. In this step the average

TABLE V. TEACHERS' ESTIMATES OF SCHOOL ABILITY, RED-WOOD CITY CHILDREN.

	No.	Per cent.
Superior	0	0.0
Average	13	37.1
Poor	13	37.1*
Inferior	7	20.0
V. Inferior	2	5.8
Total.....	35	100.0
* Median.		

TABLE VI. AGE-GRADE DISTRIBUTION OF 182 POTENTIALLY DELINQUENT SCHOOL CHILDREN.

Age		I		II		III		IV		V		VI		VII		VIII		Total
yrs.-mos.		B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	
5-6	to 5-11	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
6-0	to 6-5	8	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
6-6	to 6-11	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
7-0	to 7-5	9	2	5	...	1	...	...	...	...	...	...	...	...	...	...	...	17
7-6	to 7-11	1	4	2	3	...	...	...	...	...	...	...	...	...	...	...	...	10
8-0	to 8-5	1	1	3	1	4	...	1	...	...	...	...	...	...	...	...	...	11
8-6	to 8-11	..	..	...	1	2	2	...	1	...	...	...	...	...	...	...	...	6
9-0	to 9-5	1	..	2	4	2	2	...	...	...	...	...	...	...	...	...	...	11
9-6	to 9-11	..	1	1	1	...	...	1	...	3	...	...	...	...	...	...	...	7
10-0	to 10-5	1	..	1	1	2	1	4	1	1	...	...	...	...	...	...	...	12
10-6	to 10-11	..	..	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2
11-0	to 11-5	..	1	...	...	...	...	2	...	1	1	...	2	...	...	...	...	7
11-6	to 11-11	..	..	...	...	...	...	1	1	...	2	2	1	...	...	...	...	7
12-0	to 12-5	..	..	...	...	...	...	2	...	4	...	3	...	2	2	...	...	13
12-6	to 12-11	..	..	...	...	...	...	...	...	1	2	...	2	1	...	...	...	6
13-0	to 13-5	..	..	...	...	...	...	...	...	2	1	2	2	4	...	...	...	11
13-6	to 13-11	..	..	...	...	...	...	...	...	3	1	5	2	...	1	...	...	12
14-0	to 14-5	..	..	...	...	...	...	...	1	...	...	...	4	3	1	1	...	10
14-6	to 14-11	..	..	...	...	...	...	1	...	...	1	1	...	2	1	1	...	7
15-0	to 15-5	..	..	...	...	...	...	...	...	...	1	...	5	1	1	...	...	8
15-6	to 15-11	..	..	...	...	...	...	...	...	...	...	...	1	1	...	1	...	3
16-0	to 16-5	..	..	...	...	...	...	...	...	...	...	...	...	...	3	...	...	3
16-6	to 16-11	..	..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
17-0	to 17-5	..	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
17-6	to 17-11	..	..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
TOTALS		25	14	14	11	11	5	8	9	5	13	9	12	16	15	12	3	182

group retains its proportions while the real change in constitution is located at the bottom of the scale; the lowest group increases about ten fold if the two classifications may be compared. It would seem

TABLE VII. EXTENT OF ACCELERATION, NORMAL PROGRESS, AND RETARDATION IN SANTA ANA AND REDWOOD CITY GROUPS.

	Santa Ana		Selected on account of conduct.					
	Total	Pct.	Santa Ana	Pct.	R'dw'd	Pct.	Total	Pct.
Accel. ....3 years	2	0.1	.....	.....	.....	.....	.....	.....
“2 years	52	3.1	7	4.8	.....	.....	7	3.8
“1 year	618	36.2	39	26.5	2	5.7	41	22.5
NORMAL .....1 year	617	36.1	47	32.0	7	20.0	54	29.7
Retard. ....1 year	266	15.6	34	23.1	12	34.3	46	25.3
“2 years	99	5.8	15	10.2	7	20.0	22	12.1
“3 years	31	1.8	3	2.0	6	17.1	9	4.9
“4 years	22	1.3	1	0.7	1	2.9	2	1.1
“5 years	.....	.....	1	0.7	.....	.....	1	0.6
Total Accel.	672	39.4	46	31.3	2	5.7	48	26.3
Total Normal .....1 year	617	36.1	47	32.0	7	20.0	54	29.7
Total Retarded .....1 year	418	24.5	54	36.7	26	74.3	80	44.0
	1707	100.0	147	100.0	35	100.0	182	100.0

that the selection of a delinquent group involves the inclusion of larger proportions of the definitely feeble-minded among those brought before the juvenile court authorities.

School ability. Teachers' estimates of general school ability were obtained in Redwood City as tabulated for the selected group in Table V. A normal distribution would have its median case in the average group with symmetrical percentages above and below. The table shows the median falling one group below the average and no cases above the average class. The age-grade distribution of Table VI shows results which are but a natural result of a low level of school ability. The total selected group compared with the Santa Ana total shows range of distribution the same but a lowering of one year of the acceleration and an increase of one year of the range of retardation. Moreover, the percentage of both accelerated and normally graded individuals is smaller and the proportion retarded is decidedly increased. The Redwood City data show the effect in the extreme. This may be due to lack of adequate sampling or to a lower grade of ability or possibly to a different rate of promotion. It is to be noted that the Santa Ana total distribution shows an unusually high rate of acceleration.

Meaning of potential delinquency. The data above, as stated previously, deal with individuals in the public schools who have to a more or less extreme degree shown characteristics which are sufficient to make them different from the rest of the school population. At the same time they have not committed sufficiently offensive or sufficiently unsocial acts to be adjudged delinquent by the juvenile court authorities. "Such children" according to Dr. Williams, in the Santa Ana report (page 35) "may be considered **potentially** delinquent." But what are the limitations to be placed on what finally is to be considered as Potential Delinquency? From such a brief study as this, or from purely theoretical reasoning, it is impossible absolutely to define conditions. Certainly a few general facts may be tentatively considered as belonging among the elements necessarily involved. The name "potential delinquent", applied to a boy, implies that he has in his make-up the possibilities and inherent characteristics which if exposed to the proper environmental conditions will eventually evolve into the legally termed delinquent.

Objectively, what constitutes potential delinquency? Dr. Williams (p. 35) speaks of this condition "as repeating the history of boys and girls who are now wards of the state in public institutions". Research workers in various institutions for delinquents are finding by careful investigation and analysis the elements that are characteristic of delinquency. For example, the department of research of Whittier State School, by laboratory and institutional observation and by actual field investigation obtains for delinquent boys detailed personal history on the following outline: (1) chronological data; (2) intelligence; (3) physical condition; (4) moral character; (5) temperament; (6) conduct; (7) associates; (8) amusements; (9) education; (10) vocational record; (11) home conditions; (12) neighborhood conditions; (13) family history. To finally determine the nature of potential delinquency, it will be necessary to make studies of a similar nature of those who in the public schools are going through similar experiences and development as those who have already become delinquent. The important problem then is to follow delinquent histories back as far as possible, keeping them definitely defined as individuals and as a group from those who in later years are the social members of the community.

Significance of potential delinquency. This leads then to the problem of preventive work, preparation of a constructive program which will discover those who are potentially delinquent and further dividing them into the group who with proper treatment will develop socially, and the group, who due to inherent defect, can never become social individuals. This is the necessary object of purely research work and is necessary for the final efficient administration of a practical program. This study has endeavored to show some of the features in our present educational population which are in need of both extensive and intensive study. Bureaus of research in connection with city and state school systems are needed to make eugenical, psychological and educational investigations.

On the basis of the findings of research work there must be built machinery for the care of those found in need of special supervision and treatment. We have seen that the 8.7 per cent of the Santa Ana school children represent those of the state of California who, later through increasing unsocial activity, may swell the expensive burden of the state. A preventive school with proper supervision and educational facilities as advocated by Superintendent Fred C. Nelles⁴ would doubtless involve less expense and serve more efficiently for the development of a social race than the present system which, even with the best probation work, allows a heavy custodial burden to fall on the state. By this means would be reached a large number of those whom this study has found to be exceptional in conduct, character and temperament.

Likewise there is the problem of the defectives, those who finally are unable to manage themselves and their affairs with ordinary prudence. The work of the psychological clinics, special schools, moron colonies, are beginning to meet this problem. There is needed a more extensive and more active program as well as a more scientific, sane and uniform organization.

4. Nelles, Fred. C. and others: Proposal to establish a state preventive school for the parental supervision, education and vocational training of boys. Whittier State School, General Bulletin No. 2, June 1917. pp. 28.

SUMMARY AND CONCLUSIONS.

1. There are in the public school population a percentage of individuals who on account of exceptional conduct are in need of extensive and intensive study. Hitherto these individuals were known as "troublesome".

2. The characteristic unsocial behavior of these troublesome children bears a definite relation to those activities for which other individuals are adjudged delinquent. This relation is probably a process of elimination and selection, the "troublesome" population contributing certain of its members to the delinquent population.

3. Increased proportions of excitable individuals are found to exist in this selected group.

4. The general level of intelligence of the troublesome group is lower than that of the total school population. The proportions of the several levels of intelligence show, as we proceed from total or average populations to more and more selected delinquent populations, an increase in percentage of feeble-minded with decrease in proportion of the average-normal. The segregation and supervision of the defective is one way of eliminating or preventing the growth and prevalence of delinquency.

5. Parallel with the lower level of intelligence there exists a poorer general ability to meet the requirements of present educational facilities.

6. The potential delinquent may be considered as that child who has the inherent characteristics, which, when exposed to certain environmental conditions may evolve into delinquency. This condition can be recognized as that in which individuals are repeating the history of those who have already become delinquent.

7. Research facilities are needed in connection with the public school system to further analyze and study the nature and course of delinquency as expressed in potential delinquency.

8. Further facilities of a constructive nature such as state parental schools under educational jurisdiction should be established. Present facilities, as special schools, psychological clinics and scientific educational administration should be strengthened and unified.

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REVIEWS

TERMAN, LEWIS M.; WILLIAMS, J. HAROLD; and FERNALD, GRACE M.: *Surveys in Mental Deviation in Prisons, Public Schools and Orphanages in California. State Board of Charities and Corrections, California, 1918, pp. 87.* The surveys described in this monograph were instigated by the State Joint Committee on Defectives in California composed of members of the State Board of Charities and Corrections, the State Board of Education, the State Board of Health, the Commission in Lunacy and the State Board of Control. The purpose of these surveys of mental defectives was to "furnish the necessary material upon which to base a judgment as to California's conditions and consequent needs in relation to mental defectives." It is gratifying to note the co-operation of the several state agencies in this matter, because it is one that vitally affects all of them. This kind of co-operation is rare, but it is greatly to be desired in all states.

This collection of several surveys in one monograph attacks the problem of feeble-mindedness from different angles, and, in so doing, emphasizes the fact that the state as a whole, and not any particular single agency, is radically concerned with the problem of the care

and control of the feeble-minded. There are four separate surveys in the monograph and we shall deal with each separately.

The first is a survey by Terman of the population of San Quentin Prison. Because the method of a thorough individual examination was decided upon, and because the total population of the prison was about 2,400, there was not sufficient time to test all the prisoners, and therefore a sampling only was selected. A chance selection was obtained by testing 155 consecutive entrants, and the sampling seems a very fair one in view of the great similarity in mental make-up between the first half and the second half of the total group tested. The testing was evidently very thorough as two to three hours were usually spent with each individual. The workers made use of all the standard scales and many miscellaneous tests. Most emphasis was naturally given to the results obtained by the Stanford Scale. We realize, of course, that a state report is no place for technical questions of tests, but it is to be hoped that the authors will publish elsewhere their results, showing just what use was made of the Point Scale, Trabue tests, psycho-anthropometric tests and the miscellaneous performance tests. Of particular interest to the specialist is the method used in testing and diagnosing the foreign subjects. This is all the more interesting because one of the minor, yet rather remarkable, conclusions of the study is the great amount of feeble-mindedness found among the foreigners. Only 6.6 per cent of native white Americans are feeble-minded in comparison with 22.8 per cent of Europeans (excluding Spanish and Portuguese).

Of all the cases tested 17.4 per cent were considered feeble-minded, and 12.9 per cent borderzone or doubtful cases. Only 6.5 per cent were superior. These percentages agree very well with the results of similar studies in correctional institutions. As the authors say, the results emphasize "the necessity of bringing a larger proportion of our defectives under social surveillance and restraint."

This study is peculiar in that no great correlation was found to exist between mentality and number of previous convictions. The brief histories of the feeble-minded and borderzone cases add a concreteness to the survey that should bring added conviction to the popular reader.

Terman is also responsible for the second survey. This is an at-

tempt to estimate the amount of feeble-mindedness among the school children of "X" County, California. A sampling of schools was taken, and all the doubtful cases in these schools were tested by the Stanford Scale. The doubtful cases were selected in accordance with the ranking of the children by the teachers, taking also into account the age-grade classification of the child. It is doubtful whether the investigators would miss any cases by a careful use of this method. The net result of their study would make it appear that they did not, since they conclude that about four per cent of the school population of this county is feeble-minded. This percentage is remarkably high, as the authors themselves realize. To the reviewer this and other indications of a very high percentage of low mentality in rural districts means that we must continue our surveys of large numbers of children in various parts of the country. It may be that our conception of average mentality, based largely upon city children, is a little too high. Compare also the four per cent feeble-minded among the school children of this county with the estimate of one per cent feeble-minded for the population at large, which the author uses in the previous study on prisoners. As a partial explanation of the high percentage of feeble-mindedness the author suggests the large proportion of foreigners. They contributed far more than their share to the total number of feeble-minded. This again raises the question of the validity of our scales for the diagnosis of foreigners.

The most interesting conclusion of the author is that "the high per cent of feeble-mindedness in "X" County, or at least in the tested areas of the county, does not hold for the population in general, but is due to the presence of a rather large number of families in which feeble-mindedness is hereditary". And the evidence in support of this conclusion is very impressive.

The estimate of the cost of supporting this burden and the recommendations as to what should be done have evidently been taken seriously by the State of California, since we are informed in a footnote that the legislature has provided a new state institution for the feeble-minded.

The third study by Williams deals with the dependent children of the state. Five institutions were surveyed, four homes for dependent children and a maternity home for unwed mothers. The

examination included 162 cases and was in every case a very thorough one.

The general picture of the mentality of the dependent children shows an excessive amount of mental dullness or backwardness. The amount of feeble-mindedness would not appear to be as great as among delinquents in our state institutions, but it is sufficiently great to warrant serious consideration. The author estimates that there are 319 feeble-minded children in sixty-one orphanages in the state, and wisely recommends that one such institution be reserved for all the feeble-minded cases. This would seem a sensible plan and one that might be readily carried out.

The amount of feeble-mindedness among the twelve maternity cases is very great. Five of these are diagnosed as feeble-minded and two are considered borderzone cases. The injustice of allowing these children (in intelligence) to be at large and their danger to society is well brought out.

The description of the feeble-minded cases gives the study an added value. The author again and again lays emphasis on the hereditary character of mental defect, and illustrates by some brief family histories and charts. He also points out the dangers surrounding the adoption of orphan children without a thorough mental and physical examination.

This study of dependent children has been carefully carried out and is a valuable addition to our rather meagre knowledge of the mentality of the dependent child.

The last study of the volume is a brief one by Fernald describing the mental examination of seventy-five, out of eighty-five, dependent children in a children's home. In this home about thirty-three per cent of the children were considered mentally defective.

The whole monograph gives the reader an impression of thoroughness and accuracy. In its treatment of the dependent, the delinquent and the ordinary school child it shows how the problem of feeble-mindedness surrounds us on all sides. From the appearance of surveys in other states, we know that such conditions are not peculiar to California, but this publication should bring home to the people of California the great need of active measures to combat and control this menace to social progress. The greatest asset to a state is an

intelligent citizenship, and an intelligent citizenship can rise to greater heights when free from the trammels imposed upon it by its weaker and defective brethren.

RUDOLF PINTNER.

INSTITUTION REPORTS

INDIANA. State Prison, Michigan City. Annual Report to the Governor, 1917, pp. 56. Dr. Paul E. Bowers, physician: "It has been my constant aim to prevent disease, for it is a well known fact that prevention is of greater importance and affects more people than does the cure of disease. Toward this end sanitation, segregation, examination, vaccination and close inspection has been in force, and the results on a whole have been gratifying.

"Three hundred and eighty new prisoners were examined socially, physically and mentally during the year. Great care has been exercised in obtaining this sociological data from the prisoners themselves. Of course it is at once apparent that a field agent could supplement and make these histories much more accurate than they are.

"The physical examination in each case is thorough and follows the outline employed in all modern hospitals. All physical defects are carefully recorded in the hospital record so that the prisoner may be placed in the hospital at the earliest opportunity to receive the necessary medical or surgical attention needed in the individual case.

"Following the physical examination the prisoner is vaccinated; then follows the mental examination to ascertain the mental status of the prisoner. The latest psychiatric and psychological tests are employed, that the proper mental classification of the prisoner may be made. By this means of examination valuable information is secured which is of considerable worth to the Deputy Warden in assigning men to their tasks; to the Warden as administrative officer, and to the Boards of Pardon and Parole.

"The percentage of venereal diseases among the prisoners is quite high, syphilis, gonorrhea and chancroids appear in the active stage in about twenty per cent of all admissions. Those suffering with venereal disease are isolated and put upon the most energetic treatment until it is safe for them to mingle with the other prisoners.

"All syphilitics are kept under constant treatment while in the prison and to this class of venereal diseased individuals, a prison sentence is a blessing in disguise, for it saves them from the further ravages of syphilis in the form of locomotor ataxia, general paresis and cerebral lues. It also prevents the dissemination of the venereal diseases to a great extent when these men are released to go outside.

"The tubercular ward of the prison is always full and it is easy to see, with our large population, why this should be the case. It is a regrettable fact that many prisoners are sent to this institution who are suffering with

tuberculosis in some form. Tuberculosis is responsible for more deaths in the prison than any other disease.

"The psychopathic ward of the prison hospital is filled to its capacity and many mentally defective individuals are housed in the cell houses because we lack the room to segregate them. The insane, epileptic and feeble-minded men come into this institution in the same proportion as in former years.

"Twelve lunacy commissions were held and twelve insane prisoners were transferred to the Indiana Hospital for Insane Criminals where they will receive the proper treatment indicated in their respective cases."

PERIODICAL LITERATURE

ABBOTT, EDITH: CRIME AND THE WAR. England and France are seriously considering social changes that are accompanying the war and that may be expected to follow its conclusion. There has been a decrease in the number of persons convicted of crime in both England and France. In the former country it has been accounted for by "(1) the enlistment of many habitual petty offenders; (2) the restrictive orders issued by the Central Control Board (Liquor Traffic) and those made by the justices and by the military authorities; (3) the great demand for labor, rendering employment easy and well paid, and resulting in ability to pay fines." Under the Criminal Justice Administration Act of 1914 (English), the courts must give a man time to pay his fine and may substitute "police custody" for imprisonment in case of short sentences. Every belligerent nation must be prepared for a grave increase in crime after the war, and society is obligated to make every effort to save men convicted of minor offenses from the demoralization of a prison term. Professor Roux, a French criminologist, believes there will be an increase of crime because of the economic and moral readjustments which must be made. He says "young delinquents who are growing up may also swell the criminal population in the early days of peace." Immediately after the close of the Civil War there was a great increase in crime and disorder not only in the south, where conditions were abnormal, but throughout the north as well—and a large proportion of the new offenders were the men who had "worn the blue." The relationship between crime and war was the subject of comment by Erasmus and More several hundred years ago. America, as well as France and England, should take all possible measures to make the transition from war to peace as little burdensome as possible.—*Journal of Criminal Law and Criminology*, IX-1, May, 1918, pp. 32-45. W. W. C.

CASE, IRENE AND LEWIS, KATE: ENVIRONMENT AS A FACTOR IN FEEBLE-MINDEDNESS. THE NOLLY FAMILY. Ten related families which have applied to the United Charities of Chicago for aid offer an interesting study in the effects of environment and heredity. Most of the members of the group have become segregated in a district known for its poverty, shiftlessness, drunkenness, and general dependence upon the county. In Ireland these people belonged to the small farmer class, and

here they are plunged into the narrow, crowded districts of lower city life, making a living as untrained laborers—the first to be thrown out of work. The general conditions of shiftlessness, non-support, and drunkenness lead to loose morals, syphilis, feeble-mindedness and criminality. With the exception of two families, all were alcoholic. In all cases where both parents were alcoholic there always resulted one or two offspring who were feeble-minded or sexually delinquent. No doubt alcoholism had some influence on the instances of insanity, suicide, tuberculosis, petty crime, epilepsy, and malnutrition. Cases of feeble-mindedness can not be traced to an antecedent case of the same kind, but in every instance the taint of alcoholism has appeared, and the germ plasm could not have remained unimpaired. Lack of training is evident among members of these families and more equal opportunity for education would doubtless tend to make them better members of the community and at least self-supporting.—*American Journal of Sociology*, XXIII-5, Mar. 1918. pp. 661-669. W. W. C.

FARIS, ELLSWORTH: THE MENTAL CAPACITY OF SAVAGES. Six noteworthy sources of error in comparing so-called primitive people with civilized people are (1) racial prejudice, (2) unwarranted generalization or inference, (3) assuming that we are viewing the matter exactly as the person under observation does, (4) tendency of a native to invent an explanation rather than confess ignorance, (5) ignorance of language, and (6) knowledge of language. An analysis of the language of the tribes of the Upper Congo River indicates that it is "at least sufficiently developed to make impossible any conclusive argument of a lack of mental power or ability on account of the lack of linguistic development." Power of vision and sense of direction among these tribes do not seem to be superior to that of civilized man. The inhibition of impulses is one of the best indices of mentality; the taboos of savage life are many and complex, and they are habitually observed. It is not apparent that savages are more imitative than civilized people, and that the power of forming hypotheses to account for difficulty is as readily observed among them as among us. The emotionality of the American negro in religion may be explained by the fact that he adopted the type of religion his teachers possessed when he adopted their faith. "The hypothesis that has been forming in recent years concerning the mind of so-called primitive man is that in native endowment the savage child is, on the average, about the same in capacity as the child of civilized races." Much light could be thrown on the problem by going to the villages and making detailed mental and physical tests.—*American Journal of Sociology*, XXIII-5, Mar. 1918. pp. 603-619. W. W. C.

GORGAS, W. C.: VENEREAL DISEASES AND THE WAR. Venereal diseases are the greatest cause of disability in the army. If we had the choice of either eradicating venereal diseases or having every wounded man cured and back on the fighting line at the end of the second day, we should be able to keep more men in the trenches and have a more efficient fighting force by eradicating venereal diseases than by eliminating wounds.

Not many years ago, yellow fever was a scourge, but with the discovery that the disease was carried by the mosquito, it has been practically eliminated. The military sanitarian leans too much toward the control of venereal diseases by actually treating and caring for the case after it occurs. Besides the measures for control, more emphasis should be placed on prevention by education. Success, such as the prevention of yellow fever, cannot be hoped for until the community is educated to believe that it is individual action and the individual beliefs of the people affected that are finally going to control the disease. For the purpose of the war, we cannot wait for the slow processes of education but must "fire at everything in sight," appealing for every possible assistance that the civil population in contact with the army can give, and doing everything we can in the army towards individual prophylaxis of the men. Although there were only 600 men in the medical corps of the army when we started in this war, we now have approximately 20,000 men.—*Social Hygiene*, IV-1, Jan. 1918. pp. 3-8. W. W. C.

HENDERSON, ERNEST FLAGG: WAR ORPHANS AND CHILD WELFARE IN GERMANY. Reports of physicians in Germany indicate that the physical condition of children has become seriously worsened owing to the impoverished diet of the war years. Children of teachers and other poorly paid officials have shown the greatest falling off in weight. Figures concerning the progress of tuberculosis show that it "has doubled among children entering school and trebled among candidates for confirmation." Although many war orphans receive insurance benefits and all are given pensions and temporary assistance, many of the mothers must work. Child welfare work is being carried on by the government, each of the twenty-five states, and the cities. Various ministries have been active in rousing interest and spreading knowledge and by mandatory decrees have secured a uniformity in the welfare work of municipalities which is not paralleled in this country. There has been large scale activity to increase the resources and scope of welfare organizations and movements, such as breast-feeding propaganda, day nurseries, infants' homes, school meals, and diet kitchens. "Vocational guidance, especially for girls, since so many of them must now enter the industrial field, is being given more attention than ever before." Every city has some sort of public guardianship for all their illegitimate children. The guardian looks after the welfare of the child in many ways, but his chief duty is to compel the father to pay for the child's support. This work has become so effective that such fathers have formed an association to resist excessive and unjust demands. Besides this public guardianship, adoption and "god-mothering" are encouraged. The latter are expected to make a christening present which usually consists of an insurance policy, to mature when the child finishes his public school course.—*Survey*, XL-2, Apr. 13, 1918. pp. 39-41. W. W. C.

WHITEHOUSE, HERBERT: A DIAGNOSIS OF DEGENERACY FROM CONDITIONS REVEALED BY A FIELD STUDY OF GREEN LAKE COUNTY (WISCONSIN). Green Lake County is in many ways a

favored district, free from over-crowding, economic pressure, unemployment, etc., the usually recognized social causes of degeneracy. Conditions found there probably handicap society everywhere more or less, and point to deep lying biological causes of degeneration. It is obvious that drink is by far the major cause of crime in this county. Fifty-one of the 140 arrests were for drunkenness, and drinking has played a large part in causing other crimes such as assault, abusive language, sexual immorality, and petty crimes and misdemeanors. Fifty per cent of the criminals were feeble-minded or insane. Of the cases receiving public support, 56.3 per cent were feeble-minded. Mental defect, widowhood, and physical disability were the major causes of poverty. One-third of the epileptics were found mentally defective. Of the total population of the county, 0.47 per cent were insane, and 1.57 per cent, feeble-minded. With 366 persons, or 2.35 per cent of the county's population, defective and liable to transmit the defect, there is both a great economic burden and loss and a greater danger of contamination of posterity. There is a close correlation of dependency, delinquency, and defectiveness in each district, township, village and city. The village takes the lead in defectiveness, then follows the township, and then the city. The main cause of defectiveness is heredity with inebriety, vice, and abnormal conditions of the mother during gestation as contributing causes. The qualitative factors of age, sex, conjugal condition, maturity, religion, and employment are unimportant as causes of degeneracy. Closer supervision and custody are needed for persons affected by defects which follow the Mendelian laws. Social centers, community centers, boys' and girls' clubs, Y. M. C. A. and Y. W. C. A. are examples of environmental agencies that should be substituted for the brothel and the saloon. By developing an efficient social leadership through education and socialized religion, moral standards will be raised and the community will be relieved of much crime and debauchery.—*Journal of Criminal Law and Criminology*, IX-1, May, 1918. pp. 46-79. W. W. C.

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(Mention here does not preclude further comment or review.)

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A STUDY OF FIFTY-THREE JUVENILE COURT WARDS.

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This study was undertaken for the purpose of learning the mental status of persons who become wards of the juvenile court or come into informal contact with the probation officers of such courts. It was also intended to determine the ways in which a psychologist attached to the juvenile court might be of assistance.

With that end in view, there are here presented the results of psychological tests made of fifty-three persons, who came under the care of the probation officer of Santa Clara County, California, either formally or informally.

From the point of view of what can be done in the field of criminology by the use of tests for the measurement of intelligence, as well as of what undoubtedly will be done in that field when the meaning of this new application of modern psychology has come to be generally understood, this study represents a single datum. From that broader point of view, the entire study is merely a somewhat minute examination of one item in the entire social structure.

In connection with his work on the measurement of intelligence under the direction of Professor Terman at Stanford University, the writer accepted the invitation of the probation officer of the Juvenile Court of Santa Clara County, California, located in the City of San Jose to give the Binet-Simon test to as many of the wards of the court as time might permit, and advise the court in accordance with his findings. During the months of January, February, and March, 1918, therefore, the writer went to San Jose at stated intervals and there tested such persons as the probation officer had called in for that purpose. The particular persons selected for examination

were those concerning whom information was especially desired. The number of persons tested by no means exhausts the group which during this period were in some way under the care, direction or observation of the probation officer.

While some fifty-six or fifty-seven tests were made, there were probably three or four times as many other persons regarding whom the probation officer would have been glad to have had information. Aside from that, new cases are constantly being added.

The results of several of the tests made or attempted were necessarily discarded, leaving the fifty-three cases here studied. The tests were made under good conditions. A special room, unfurnished, except for chairs and table, was provided. Practically no difficulty was encountered in getting into rapport with the subjects. In most cases they were made to feel that the results of the test would enable the probation officer to advise and guide them the better.

In every instance the writer was furnished with all the information in the possession of the probation officer who has known most of the wards here studied for long periods of time. A fortunate feature of this study is the fact that a similar investigation of the wards of the same juvenile court was made by Dr. George Ordahl in January, 1916, with the co-operation of the same probation officer and by the use of the same tests. The results of that study are reported in the *Journal of Delinquency*, Vol. II, page 1, and are available for comparison with the results found by the writer.

Brief reports of the results of the tests were handed to the probation officer shortly after the examination in each instance, and this officer in turn presented them to the judge of the court for his guidance. These reports contained, in addition to statements as to mental age and intelligence quotient, some brief interpretation of these findings as applicable to the particular circumstances and the particular subject.

While this paper does not purport to be a study in criminology, or to advocate any particular theory or solution of the problems that come within the purview of the juvenile court, one cannot help realizing the tendency, in the future handling of these matters, that is clearly indicated by the definite and certain assistance which these tests bring to those who must daily deal with the various classes that find their way to the juvenile court.

I. SOME PRELIMINARY STATEMENTS.

The test used in this study is the Stanford Revision of the Binet-Simon Measuring Scale of Intelligence, as found outlined in Professor Terman's "The Measurement of Intelligence."

The term "minor" as employed in this study means a person not yet sixteen years of age and, conversely, an "adult," as the term is here employed, refers to a person chronologically sixteen years of age or older. The reason for this division at this point is the common agreement that it is at about the age of sixteen that full mental maturity is reached. For a detailed discussion of this point reference is made to Professor Terman's "The Measurement of Intelligence."

The definition of feeble-mindedness, so often attempted, is probably not yet settled. Even in purely quantitative terminology no final statement appears as yet to have been reached. In "A Study of 150 Delinquent Boys"¹ made by J. Harold Williams, the mental age of twelve years was adopted as the boundary line between normality and feeble-mindedness in adults. Professor Terman, however, later adopts the mental age eleven for the same purpose. In this study the standard of normality is placed somewhat lower still for reasons which it is not necessary to state here.

TABLE I. SIGNIFICANCE OF INTELLIGENCE QUOTIENTS.

A normal person.	I. Q.	M. A.
(over I. Q. .75 or M. A. 12)		
Above average intelligence	above 1.10	above 17.6
Average intelligence .....	.91 to 1.10	14 to 17.6
Below average intelligence .....	.76 to .90	12 to 14
Borderline deficiency	.66 to .75	10.6 to 12
Definite feeble-mindedness		
(under I. Q. .66 or M. A. 10.6)		
Moron .....	.46 to .65	7 to 10.6
High grade .....	.56 to .65	9 to 10.6
Middle grade .....	.51 to .55	8 to 9
Low grade .....	.45 to .50	7 to 8
Imbecile	Below .46	Below 7

In this report it is not necessary to consider the boundary between better-than-average intelligence and genius or that between imbecility and idiocy, as we do not have representatives of either of these extremes. Within the range from better than average intelligence to imbecility, the writer has adopted for the purpose of this study the classification shown in Table I. Both intelligence quotient

1. Williams, J. Harold. A study of 150 delinquent boys. Buckel Foundation, Bulletin No. 1, 1915. pp. 15.

and mental age are given. The latter is intended to apply not only to adults but to minors as well. On the theory that the intelligence quotient remains fairly constant from year to year, the mental age in each instance represents for minors the probable limit of development for the given intelligence quotient found at any chronological age. For inferior intelligence, however, or for persons of very poor heredity, even this limit may not be reached, as shown by Doll.² The constancy of the intelligence quotient for these persons is by no means certain.

II. THE SUBJECTS.

This study comprises altogether fifty-three cases consisting of forty minors and thirteen adults. There are twenty-eight males and twenty-five females.

From the point of view of the way in which the persons examined happened to come to the attention of the Court or of the probation officer, the cases group themselves into three classes: dependents, delinquents, and miscellaneous. This last group, consisting of eleven cases, is really composed of unclassifiable subjects. Of the other forty-two cases, eighteen are classifiable as dependents, and twenty-four as delinquents. Table II shows the distribution from the various points of view above referred to.

TABLE II. CLASSIFICATION OF SUBJECTS.

	Minors		Adults		Totals		Total Cases
	M	F	M	F	M	F	
Dependents	7	11	0	0	7	11	18
Delinquents	14	2	2	6	16	8	24
Miscellaneous	5	1	0	5	5	6	11
Totals	26	14	2	11	28	25	53

In tables III, IV, and V are shown all the cases grouped under the headings, "dependents", "delinquents", and "miscellaneous". These tables give the original data, as to sex, chronological age, mental age, and intelligence quotient.

While the entire group of fifty-three cases is hardly homogeneous except for the fact that it possibly represents the type of person with whom the Juvenile Court and the probation officer have to deal, it nevertheless is of interest to note that for this group as a whole, ranging in chronological age from five to thirty-five years, the median intelligence quotient found is .76.

2. Doll, E. A. *Clinical studies in feeble-mindedness*. Boston, C. P. Badger, 1918. pp. 232.

TABLE III. EIGHTEEN DEPENDENTS.

NO.	SEX	C. AGE	M. A.	I. Q.	CLASSIFICATION
1	M	5-5	4-10	.89	Below Average
2	F	14-5	7-2	.49	Low Moron
3	F	10-1	8-4	.82	Below Average
4	M	12-4	5-9	.46	Low Moron
5	M	5-	4-11	.98	Average
6	M	7-7	6-2	.81	Below Average
7	F	9-8	7-10	.80	Below Average
8	F	11-7	12-6	1.08	Average
9	F	14-3	7-6	.53	Middle Moron
10	F	5-4	4-8	.87	Below Average
11	F	10-4	6-6	.63	High Moron
12	F	9-1	5-6	.60	High Moron
13	F	7-2	4-6	.63	High Moron
14	F	6-10	4-7	.67	Borderline
15	M	9-9	5-6	.56	High Moron
16	F	5-8	5-6	.97	Average
17	M	8-4	9-9	1.17	Above Average
18	M	11-4	10-6	.93	Average

TABLE IV. TWENTY-FOUR DELINQUENTS.

NO.	SEX	C. AGE	M. A.	I. Q.	CLASSIFICATION
1	F	14-8	11-8	.80	Below Average
2	M	7-8	6-2	.80	Below Average
3	M	10-10	5-8	.52	Middle Moron
4	M	15-2	12-9	.84	Below Average
5	M	14-1	9-11	.70	Borderline
6	M	14-4	7-10	.55	Middle Moron
7	M	15-4	10-8	.71	Borderline
8	M	14-11	11-2	.76	Below Average
9	F	15-	8-11	.59	High Moron
10	M	15-6	12-7	.81	Below Average
11	M	14-9	11-2	.76	Below Average
12	M	14-1	8-4	.59	High Moron
13	M	12-4	9-9	.79	Below Average
14	M	11-2	8-8	.77	Below Average
15	M	11-2	10-4	.92	Average
16	M	14-10	8-4	.58	High Moron
17	F	16-10	13-	.80	Below Average
18	F	18-	9-1	.57	High Moron
19	F	17-	7-10	.49	Low Moron
20	M	17-8	14-11	.93	Average
21	F	18-	13-2	.82	Below Average
22	M	18-	12-6	.78	Below Average
23	F	20-4	10-3	.64	High Moron
24	F	19-	11-9	.73	Borderline

TABLE V. ELEVEN MISCELLANEOUS CASES.

NO.	SEX	C. AGE	M. A.	I. Q.	CLASSIFICATION
1	F	10-4	9-6	.92	Average
2	M	12-5	8-2	.66	Borderline
3	M	11-	8-2	.74	Borderline
4	M	15-1	16-	1.06	Average
5	M	9-3	9-4	1.00	Average
6	M	13-7	11-7	.85	Below Average
7	F	16-1	9-7	.60	High Moron
8	F	31-	6-6	.42	Imbecile
9	F	35-	8-7	.54	Middle Moron
10	F	18-	10-4	.64	High Moron
11	F	19-	11-6	.72	Borderline

Fig. 1 and Table VI show the distribution of intelligence quotients for the entire group. The curve, it will be noted, is decidedly skewed. Only ten cases, or approximately 20 per cent of the total number, are found to possess average or better-than-average intelligence.

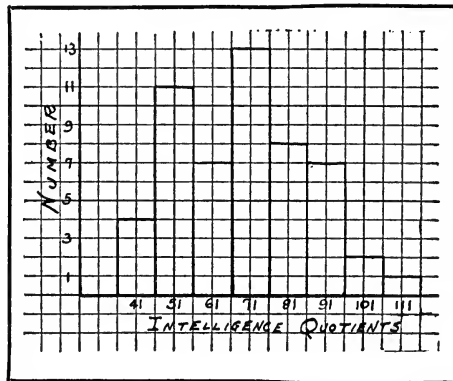


Fig. 1. Distribution of intelligence quotients for the entire group of 53 cases. (Data from Table VI).

TABLE VI. DISTRIBUTION OF INTELLIGENCE QUOTIENTS FOR ALL CASES.

I. Q.	Frequency
.41- .50.....	4
.51- .60.....	11
.61- .70.....	7
.71- .80.....	13
.81- .90.....	8
.91-1.00.....	7
1.01-1.10.....	2
1.11-1.20.....	1
Total	53

Dr. George Ordahl's study was made in connection with the same juvenile court and probation officer as those concerned in this study. His investigation was conducted in January, 1916, almost exactly two years prior to the time the present study was made, and included sixty-one cases.

In Table VII is shown the distribution of intelligence for both studies. To facilitate comparison, percentages of the total number of cases studied are used, instead of actual numbers. In the column headed "Totals" is shown the total percentage below any given intelligence quotient for each group of cases.

TABLE VII. PERCENTAGE OF ALL CASES IN EACH STUDY WITHIN CERTAIN RANGES OF I. Q. AND THE TOTAL PERCENTAGE BELOW VARIOUS INTELLIGENCE QUOTIENTS IN EACH STUDY.

I. Q.	TOTALS			
	This Study	Dr. Ordahl's Study	This Study	Dr. Ordahl's Study
Below 41	0	8%	0	8%
41-50	8%	8%	8%	16%
51-60	20%	3%	28%	19%
61-70	13%	16%	41%	35%
71-80	25%	23%	63%	58%
81-90	15%	20%	81%	78%
91-100	13%	15%	94%	93%
101-110	4%	7%	98%	100%
111-120	2%	0	100%	100%
TOTALS	100%	100%		

This comparison brings out so remarkable a similarity of results that in view of the undoubted lack of homogeneity of the groups, one is tempted to attribute the outcome to mere coincidence. Dr. Ordahl, it will be noted, found 78 per cent of all of his cases to be of an intelligence quotient below .90 and the present study finds 81 per cent of the total number of cases studied, in that classification. The present study shows 19 per cent of the cases located at .90 I. Q. or over, and Dr. Ordahl apparently found 22 per cent in that group. The figures are equally interesting if we note the percentage in each study found below 1.00 I. Q., 94 per cent and 93 per cent respectively.

If we disregard the persons over twenty-one years of age chronologically in each instance—eight in Dr. Ordahl's study and two in ours—there remain fifty-three and fifty-one cases of minors respec-

tively, and we have exactly 80 per cent of the cases in each instance below .90 I. Q. This would seem to show a remarkable constancy.

In view of the comparatively small numbers contained in each of our three groups, the comparison of medians would not be especially significant. In Table VIII is shown the distribution of all the cases in such a manner as to indicate at a glance the number of dependents, delinquents, and miscellaneous cases belonging to the various intelligence classifications.

TABLE VIII. INTELLIGENCE STATUS OF THE THREE GROUPS:
DEPENDENTS, DELINQUENTS, MISCELLANEOUS.

	I. Q.	Dep.	Del.	Misc.	Total
Imbeciles .....	.41- .45	0	0	1	1
Morons .....	.46- .65	7	8	3	18
Borderline .....	.66- .75	1	3	3	7
Dull .....	.76- .90	5	11	1	17
Average .....	.91-1.10	4	2	3	9
Superior	over 1.10	1	0	0	1
Totals		18	24	11	53

The following sections will include a detailed discussion of the three groups into which all of the cases are divided.

III. THE MISCELLANEOUS GROUP.

Since this group consists of unclassifiable cases, generalizations regarding the group as a whole would be of little value. The eleven cases comprising this group will therefore be taken up individually.

Case 4 is probably representative of a class that comes to the attention of the probation officer in his or her unofficial capacity. C. M., fifteen years of age, I. Q. 1.06, was brought in by his mother for being insolent and abusive. The record shows that the probation officer gave him "a good warning."

Case 8 is another example of this unofficial activity of the probation officer. M. B., a woman, thirty-one years of age was discharged from an insane asylum, to which she had been committed, with the statement on the part of the authorities that she was not insane. On being given the psychological examination, this woman was found to have a mental age of six years and six months, and consequently to be an imbecile by any generally accepted definition. It is interesting to note in this connection that in pronouncing the subject "feeble-minded, not insane," the examiner is not confined merely to the final finding in terms of mental age. Not only is the resemblance of the

subject to a child evident in her appearance but such resemblance is objectively determinable by the manner in which the subject either passes or fails in certain of the tests. The failure to count up to thirteen after a number of trials in year six, for example; inability to name any of the coins; missing of the number of fingers on both hands; the copying of the diamond; all resemble so clearly the behavior of the normal child of six years that Binet's likening of the feeble-minded to children is readily recalled and the hypothesis of insanity becomes untenable. One discovers no residua, to quote Binet's term. Although numerous opportunities are given, the subject, in no instance, acts like a mental adult.

Case 11 is H. C., a young woman of nineteen, found to have the mental age of eleven years, and six months. This girl was first called to the attention of the probation officers some years ago by the sheriff of the County, who found her in desperate condition, bruised, beaten, starved, and in tatters. She had run away from the family in the mountains with whom a home-finding agency had placed her. For several years H. C. has been a house worker. She can earn as much as \$40.00 a month and her board, which would tend to prove that her services as a domestic are probably acceptable. Recently, however, she decided to change her work and after a great deal of effort on the part of herself and the probation officer, she found work as waitress at a confectioner's in San Jose. H. C. stayed at her new place one day and on the next she failed to appear. She told the probation officer that she found she did not like the work but the latter suspected that H. C. was dazed and could not master the problems involved in remembering the orders of patrons and in giving them proper checks. The record shows that this subject failed in all of the arithmetic problems in year fourteen. She was unable to figure out how long it would take to save \$300.00 when one earned \$20.00 and spent \$14.00 weekly; she was unable to figure out how many pencils one could get for fifty cents if two cost five cents; she was unable to determine the price of seven feet of cloth if the cloth is worth fifteen cents a yard. Obviously H. C. was not capable of doing the work which she had undertaken. Fortunately she can earn more at the work which she has now resumed.

About Case 10, R. J. age eighteen, mental age 10-4, very little is known by the probation officer. She was brought to the office by

the secretary of the Y. W. C. A. to whom she had applied for assistance. She seems incapable of self-support.

Case 9 is L. C. age thirty-five, mental age eight years, seven months. This woman, a low grade moron, probably not an imbecile, is the mother of two children (Cases 3 and 4 in the dependent group) and some others, whose home was found to be in such terrible condition that it was considered necessary to take the children from her. This case was brought to the attention of the probation officer by the husband, who was in despair over the fact that the house was unbelievably filthy and that the mother was incapable of taking care of children, home and husband. He stated that his wife appeared unable to prepare a meal. The deputy sent to investigate conditions reported that the filth and disorder of the house were indescribable. The character of the family may be judged from the fact that the children, (further referred to in the next section) tested at .46 and .82 respectively. One of these, a boy of 12 years, is in the second grade and his removal from school has been repeatedly requested. The father was not examined.

The foregoing is not an isolated case and the conditions under which children are brought up in the homes of feeble-minded parents are further illustrated by Case 15 among the dependents. That boy, I. Q. .56, was removed from his home with five or six brothers and sisters under conditions similar to those just described. In that case both the parents appear to be deficient. One of their children is said to have died of starvation. In that case also the home was visited and the committee reported "the awful conditions in which this family lived."

Conditions of this sort are also illustrated by our next case, No. 7 of this group. V. M., age ten years, four months, I. Q. .92, was removed from her home on the demand of neighbors. It appears that this child's mother and her sister, Delinquent Case 7 gave birth to children at about the same time and probably by the same father. The mother is a widow. The probation officer states that in her opinion she is clearly deficient, immoral, and very filthy in person and home. This child is being cared for by the county. While not delinquent, she has so disagreeable a disposition that it is found necessary to change her boarding home frequently.

Our next two cases, 5 and 6, are two runaways. O. S., age nine

years, three months, I. Q. 1.00, apparently has a comfortable home in Oakland. His father is a civil engineer. Asked why he ran away, he said he came down to San Jose to pick poppies. There are indications of queerness about this child, which would doubtless have repaid further study, had time been available. J. G., age 13-7, I. Q. .85, was picked at random from a group of eight or nine San Francisco boys taken from a freight train on the first day of the spring vacation. Unfortunately there was not time to test more than this one sample, as the boys had to make the train which was to take them back to San Francisco. Asked how they thought their mothers would feel about their disappearance, the boys answered almost unanimously that that question had not occurred to them until after they were on the train. J. G.'s mother supports him and herself by working out by the day. Possibly J. G.'s failure to restrain the impulse out of consideration for her, is consistent with I. Q. .85.

Case 7, T. M., female, age sixteen, I. Q. .60, is one of four children, all of whom are dependents, being supported by the county. The father of these children is in the penitentiary for immoral conduct toward his own daughters. T. M. is now old enough to work but she cannot hold a place and the probation officer is kept busy looking up new jobs for her. Apparently there is a great difference between the mental age 11-6, which is sufficient to make H. C., (Case 11) an acceptable house worker who can earn \$40.00 a month, and mental age 9-7, which is not enough to enable this girl to hold a place.

The last two cases in this group, 2 and 3, are brothers, F. and M. C., twelve and eleven respectively, with I. Q.'s of .66 and .74. Another brother is in the delinquent group (Case 24, I. Q. .52) and these were tested primarily on that account. However, both boys have already shown delinquent traits.

IV. THE DEPENDENTS.

Our dependents are all minors and number eighteen. They range in chronological age from 5-0 to 14-5. In intelligence, they range from I. Q. .46 to 1.17 as shown in detail in Table III, and by small groups in Fig. 2 and Table IX. As will be noted from Table VIII, our eighteen dependents include seven feeble-minded persons of moron grade, one borderline case, five below normal, four of average intelligence and one of superior intelligence. The median I. Q. found for this group is .81.

TABLE IX. DISTRIBUTION OF INTELLIGENCE QUOTIENTS OF THE DEPENDENT GROUP.

I. Q.	Frequency
.41- .50.....	2
.51- .60.....	3
.61- .70.....	3
.71- .80.....	1
.81- .90.....	4
.91-1.00.....	3
1.01-1.10.....	1
1.11-1.20.....	1
Total	18

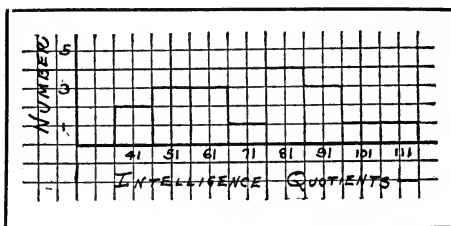


Fig. 2. Distribution of intelligence quotients of the dependent group of 18 cases. (Data from Table IX).

In this connection it is of some interest to note that Dr. Ordahl found thirteen of the twenty dependents examined by him to test below .90. The present study shows thirteen of the eighteen cases examined classifiable in the same way. Taking the two studies together, fairly safe conclusions would seem to be warranted regarding the intelligence status of those dependent children of Santa Clara county, who come to the attention of the court.

Our cases will be considered under five headings i. e. the S. family of five children; the H. family of four children; the L. family of two children; the C. family of two children and the miscellaneous group of five minors.

The S. Family. Mr. S., the father of these five girls is a man past sixty, who has been a barber for the greater part of his life and, according to his statement, he has for almost all of that time had shops of his own. The mother of these children, the second or third wife of Mr. S., is now living with the son of Mr. S. by a former marriage. The case came to the attention of the Juvenile Court on the complaint of Mrs. S., who stated that Mr. S. was refusing to support

the children. Mr. S. had no funds with which to support them and the children were consequently dependent on the county for support.

The intelligence status and school location of these girls are shown by the following table:

	H.	E.	S.	R.	V.
Age	14-3	9-1	7-2	10-4	5-4
I. Q.	.53	.60	.63	.63	.87
Grade	IV	I	I	II	O

Possibly the above array is sufficient without further comment. It may be added, however, that Mrs. S. is the mother of several other children by both of her husbands.

The H. Family. The father of this group of four children and of some others not tested, is in the penitentiary for persistent failure to provide for them and their mother. The county authorities and the private charities of San Jose carry the burden of looking after the family. Mr. H., it appears, had some ability as a dancer and boxer but made a poor success in trying to manage a cleaning and dyeing establishment. Before he went to the penitentiary, they were dependent because of his lack of interest regarding them. This family is somewhat superior to the S. group, as will be seen from the following statement:

	I.	H.	A.	A.
Age	9-8	7-7	5	11-7
I. Q.	.80	.81	.98	1.08
Grade	III	I	O	VI

Cases 17 and 18 are brothers, A. and C. L. respectively. The chronological ages are 8-4 and 11-4 and the I. Q. 1.17 and .93. The father deserted the family, leaving them dependent on the county. A., who has an I. Q. of 1.17, has never given trouble on any account, but C., I. Q. .93, has a tendency toward delinquency. He has been guilty of setting fires and of petty thieving.

Cases 3, 4, and 15 are the children referred to in the preceding chapter as having been taken from the homes of incompetent parents. In the case of the first two, who are brother and sister, the mother was tested and found to be a low grade moron (Miscellaneous Case No. 9) and in the case of the third, it seems almost certain that both parents are feeble-minded. G. and L. C., ages 10-1 and 12-4, I. Q. respectively .82 and .46, are members of a family of three children

whose father finally requested that they be taken out of the home as the mother was utterly incompetent to care for them. A. W., age 9-9, I. Q. .56, is one of five or six dependent children, whom it was found necessary to remove from their home since the committee "reported the awful condition in which this family live."

H. B. and M. D., Cases 14 and 2, are also children of deserting fathers. H., age 6-10, I. Q. .67, has been adopted by several families in succession and regularly found not to "fit in". Considering the status of her intelligence, one can hardly be surprised at this. M. D., age 14-5, I. Q. .49, is a dependent child, found in the high second grade of one of the San Jose schools.

O. H., age 5-5, I. Q. .89, was examined for the purpose of assisting the probation officer in determining whether the child should be offered for adoption. His father is in the penitentiary for forging.

D. H., age 5-8, I. Q. .97, is the daughter of a woman now living with her fourth husband. This woman habitually gives her children away whenever she can possibly do so. D. was given away in this manner, but her case was brought to the attention of the juvenile court on account of the fact that the people with whom she was living were mistreating her.

This completes the dependent group. It will be noted that of the eighteen children considered, seven are dependent on account of desertion, two on account of having criminal fathers in prison, one on account of having an immoral mother and eight on account of the fact that the parents are generally incompetent—some of them known to be feeble-minded by actual test.

It will be noted from the foregoing diagram that only one of these cases was found to be endowed with better-than-average intelligence.

In view of the similarity in results between Dr. Ordahl's dependents and ours, it would seem entirely fair to combine the two groups for the purpose of drawing conclusions regarding the intellectual status of those dependent children in Santa Clara county with whom the juvenile court and probation officer have to deal.

Taking both groups, we have thirty-eight children of whom some 3 per cent are found to have an I. Q. above 1.10, as compared with 20 per cent in the population as a whole. Similarly, we find 68 per cent possessed of an I. Q. lower than .90, as compared with 20 per cent

in the population at large. Within the range .90-1.10 I. Q. we find 30 per cent as compared with more than 50 per cent in the community at large. Below .66 I. Q., dividing line between borderline deficiency and definite feeble-mindedness, we find, in the two studies combined, twelve cases—five in Dr. Ordahl's investigation and seven in this one. This means that approximately one third of these children are definitely feeble-minded even when that term is employed with more than ordinary liberality, as compared with one in one hundred in the population at large.³

While these figures must be regarded with scrutiny because our cases consist largely of family groups and a higher general level would possibly have been found if we had examined only one member of any family, the findings are important because of the similarity in results of the two studies and on account of the fact that there are several families involved.

During the year 1917, the probation office found free homes, which in many cases means adoption, for 152 of the county's dependent children. Doubtless many of these children will be found not to "fit in". In view of the foregoing figures the adoption of young children without painstaking investigation and examination, would appear to be a hazardous undertaking in Santa Clara county.

V. THE DELINQUENTS.

Our delinquent cases number twenty-four and are divided for purposes of detailed examination into two groups: one consisting of sixteen males and the other of eight females.

Table X and Fig. 3 show the distribution of intelligence quotients for this group.

TABLE X. DISTRIBUTION OF INTELLIGENCE QUOTIENTS OF THE DELINQUENT GROUP.

I. Q.	Frequency
.49- .53.....	3
.54- .58.....	2
.59- .63.....	2
.64- .68.....	1
.69- .73.....	3
.74- .78.....	4
.79- .83.....	6
.84- .88.....	1
.89- .93.....	3
Total	24

3. Terman, L. M. *The Measurement of Intelligence.* p. 78.

As will be noted from Table VIII, our twenty-four delinquents include eight morons, three borderline cases, eleven dull normals and two persons of average intelligence.

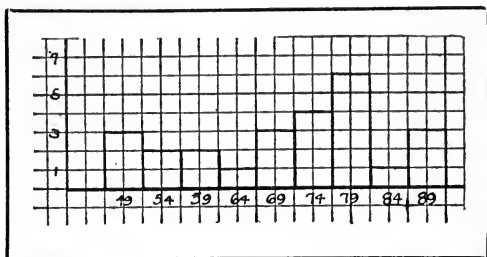


Fig. 3. Distribution of intelligence quotients of the delinquent group of 24 cases. (Data from Table X).

In chronological age, this group ranges from seven years and eight months to twenty years and four months. The median I. Q. for this group is .76.

Turning again to Dr. Ordahl's study, we may note some rather remarkable facts. His group of minor delinquents comprises thirty-three cases ranging in chronological age from six to twenty. The median I. Q. for this group is .77. Equally interesting is the fact that of cases possessing an I. Q. of .75 or less, (borderline deficiency or below) there are in our group 46 per cent and in Dr. Ordahl's 48 per cent. Below .90 I. Q., the percentage found by Dr. Ordahl is 87 and that found in this study is 91.

We may in this instance pursue the same method as that followed in discussing the intelligence status of the dependent children. In view of the agreement in figures, we may take the entire group of 57 cases (Ordahl's 33 and our 24) and for the group so composed, find the percentage endowed with less than average intelligence. The percentage of cases possessing an I. Q. of less than .90 in this consolidated group is 89; i. e. nine out of every ten subjects.

Our findings are also in accord with Ordahl's that "the group of minor delinquents apparently belong to a somewhat lower level" (than the group of minor dependents).

Of the sixteen males ranging in age from 7-8 to 18, we find that petty thieving plays a role in thirteen instances. This type of delinquency apparently is committed more naturally in groups than by individuals singly.

A. B., age 14-1, I. Q. .59, M. B., age 12-4, I. Q. .79, and N. E., age 11-2, I. Q. .77, (Cases 12, 13, 14) are three of a larger group who engaged in the business of petty thieving of various kinds. They stole candy, gum, canned goods, took a purse from a person's pocket in a shop in San Jose.

T. C., age 10-10, I. Q. .52, and J. P., age 7-8, I. Q. .80, (Cases 3 and 2) belong to a gang that was engaged in petty thieving around the school building, where they attended. They also committed a burglary in the office of a San Jose plant.

R. F., age 14-4, I. Q. .55, and G. B., age 14-1, I. Q. .70 (Cases 6 and 5) were caught stealing junk about town.

Four others of this group, showing the petty thieving tendency (Cases 22, 7, 11, 4) range in I. Q. from .71 to .84.

The next two cases, W. V., age 14-11, I. Q. .76, and C. D., age 17-8, I. Q. .93, (Cases 8, 20) combine general unmanageableness at home with petty thieving.

E. B., age 15-6, I. Q. .81 (Case 10) forged his father's name to checks. A. T., age 11-2, I. Q. .92 (Case 15) wrote obscene letters in school. J. B., age 14-10, I. Q. .58 (Case 16) was merely guilty of fighting with some boys, for which offense he was arrested and brought before the court.

All of the eight girls were offenders against sex morality in one form or another. The range in chronological age for these girls is 14-8 to 20-4. The median I. Q. is .61, the range in I. Q. being from .49 to .82.

The mental level of the girls is distinctly lower than that of the boys as will be noted from the difference in the median I. Q. (.61 for the girls and .76 for the boys) as well as from the differences in range of I. Q. which is from .49 to .82 for the girls and from .52 to .93 for the boys.

In this connection it is interesting to note that of the nine delinquent girls tested by Dr. Ordahl the range of I. Q. as shown in his Table II is from .40 to .96, median .72. Taking the two groups together, as it would seem legitimate to do, we have seventeen subjects only one of whom is endowed with a degree of intelligence classifiable as average,—I. Q. .96. If we omit this one case, the range is from .40 to .86, the median remaining .72. From this data it would appear that about 6 per cent of these girls are endowed with average intelligence. Of these seventeen, eight are definitely feeble-minded (one an

imbecile), two are borderline cases and six are normal persons of less than average intelligence.

Of the eight girls, it is interesting to note that two of them were assisted by the court in compelling men to marry them. F. L., age seventeen, I. Q. 49, had a romantic episode prior to this marriage under compulsion. It appears that she made an arrangement to meet a married street car conductor in Oakland. Apparently this man as well as F. went to Oakland but they did not succeed in meeting, whereupon F. telegraphed her conductor friend at his home address, an act which naturally led to the apprehension of both the conductor and F., who was at the time a ward of the court. The other of these girls is R. F., age nineteen, mental age 11-9.

T. S., age eighteen, mental age 9-1, met a non-commissioned officer located at a camp near San Jose, who persisted in his desire to marry her after it had been explained to him that she was a ward of the court on account of immoral conduct which had lasted for several years past and, furthermore, that she was a feeble-minded person who would never improve. The consent of the court, which was necessary on account of the fact that T. was a ward, was granted and the marriage took place.

The home conditions have been gone into incidentally in taking up the individual cases. The location of these persons in school furnishes interesting confirmation of the accuracy of the tests and serves further to show the mental level of these delinquents. Of the twenty-four cases considered, fifteen were attending school at the time the tests were made. Of these, two were in the first grade. Their ages respectively were 7-8 and 10-10. Three of the cases were found in the fourth grade, the age range being from 11-2 to 14-1. One boy of 15-4, was attending the fifth grade. Five subjects ranging from 11-2 to eighteen years were located in the sixth grade; and four cases, ranging from 14-1 to 15-2 were located in the seventh grade.

VI. SOME GENERAL NOTES.

There are some observations applicable to all the cases that may be made here.

Family groups. Primarily we have studied our cases so far from the point of view of the reason that brought them to the attention of the county officers. It happens, however, that twenty of our

fifty-three subjects are inter-related. While it is not proposed to make any deductions from the findings from this point of view, it may be of some interest to arrange the subjects in family groups (Table XI). At least the contention that mental endowment is a matter of heredity, and tends to run in families, receives the usual confirmation.

TABLE XI. ARRANGEMENT OF SUBJECTS IN FAMILY GROUPS.

Family	Individuals	I. Q.
The L brothers	C.....	.93
	A.....	1.17
The M sisters followed by male cousin N	J.....	.64
	V.....	.92
	L.....	.73
The C family (mother, son, and daughter)	Mother.....	.54
	L.....	.46
	G.....	.82
The C. brothers	T.....	.52
	F.....	.56
	M.....	.74
The H children	I.....	.80
	H.....	.81
	A.....	.98
	A.....	1.08
The S sisters	H.....	.53
	E.....	.60
	S.....	.63
	R.....	.63
	V.....	.87

School location. From several points of view, the grade in school where subjects of school age are found is of great importance.

Such location may or may not give confirmation to the validity of the psychological tests employed. If they do give such confirmation, they demonstrate the ease with which the non-educable can be detected and indicate the futility and waste involved in carrying these children along the ordinary paths of education.

Of our fifty-three subjects, thirty-nine were attending school at the time they were tested. In Table XII is shown the location of these thirty-nine persons in school. It will be noted that while we have subjects as old as nineteen years, there are no high school students and but one eighth grade student in the group. Of the thirty-

nine, twenty-four are retarded from one to seven years. Twelve subjects are located in the grade where they belong normally if we include in our idea of normal "retarded no more than one year." Three of our subjects are accelerated by one year.

If our social institutions were prepared to adapt training to mental status, it would seem to be demonstrated by this study, as frequently heretofore, that the discovery of those children to whom ordinary school work is not well suited and who, therefore, will waste

TABLE XII. SCHOOL LOCATION OF 39 SUBJECTS, SHOWING
NUMBER OF NORMAL, ACCELERATED AND
RETARDED PUPILS.

	I	II	III	IV	V	VI	VII	VIII	To.
7	2	-----	-----	-----	-----	-----	-----	-----	2
8	2	-----	1	-----	-----	-----	-----	-----	3
9	1	-----	-----	1	-----	-----	-----	-----	2
10	-----	2	2	1	-----	-----	-----	-----	5
11	1	-----	1	1	1	1	-----	-----	5
12	-----	1	-----	2	-----	1	-----	-----	4
13	-----	-----	-----	-----	-----	-----	-----	-----	0
14	-----	1	-----	2	-----	2	1	-----	6
15	-----	-----	-----	-----	2	2	3	1	8
16	-----	-----	-----	-----	-----	-----	1	-----	1
17	-----	-----	-----	-----	-----	-----	-----	-----	0
18	-----	-----	-----	-----	-----	1	-----	-----	1
19	-----	-----	-----	1	1	-----	-----	-----	2
To.	6	4	4	8	4	7	5	1	39
Nor.	4	-----	2	2	1	1	1	1	12
Accel.	-----	-----	1	1	-----	1	-----	-----	3
Ret.	2	4	1	5	3	5	4	-----	24

their time, retard the progress of others, and perchance become delinquent, has been made less difficult than heretofore. By a psychological test of brief duration we frequently discover what it takes the school years to discover and seem, in addition, to be in a position to make safe prediction regarding the ultimate limit of development.

SUMMARY OF FINDINGS.

The findings of this study may be summarized as follows:

1. Fifty-three subjects were tested, ranging in age from five to thirty-five, of whom forty were minors and thirteen adults; twenty-eight were males and twenty-five females.

2. The cases were studied in three groups, as follows: eleven miscellaneous; eighteen dependents; twenty-four delinquents.

3. For the entire group it was found that the median I. Q. was .76, only 20 per cent of the total number being endowed with average or better than average intelligence.

4. Our distribution of intelligence for the group as a whole is in general accord with Dr. Ordahl's findings.

5. Of the fifty-three subjects, thirty-nine were attending school at the time of the psychological examination, and of these twenty-four were retarded from one to seven years.

6. The eighteen subjects grouped as "dependents" range in chronological age from ages 5 to 14-5, and in intelligence from I. Q. .46 to I. Q. 1.17. The median I. Q. is .81 and the group includes seven feeble-minded persons, one borderline case, five persons of less than average intelligence, four of average, and one of superior intelligence. Our findings agree well with those of Dr. Ordahl.

7. The twenty-four delinquent subjects range in chronological age from 7-8 to 20-4, and in I. Q. from .49 to .93. The median I. Q. is .76. The group includes eight morons, three borderline cases, eleven dull normals and two persons of average intelligence. Our findings are well in accord with Dr. Ordahl's.

THE RELATION OF MENTAL TO PHYSICAL DEVELOPMENT

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In a recent experimental study of the school children of a Missouri county some facts appeared which throw light on the question of the relation of mental and physical development.

There were 112 boys 12 years old. These were found to be scattered from the first grade to the eighth, as shown in Fig 1. The grade in which the children are found may be considered as roughly indicative of their mental development. Of course, the grade can not be a very exact indication of mental development, for many factors other than ability have their influence in determining the grade to which a child is assigned. We may safely assume, however, that mental development is an important factor in gradation.

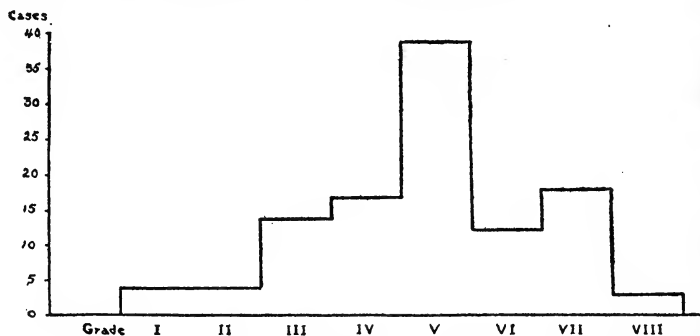


Fig. 1. Frequency surface, showing the distribution through the grades of twelve year old boys.

As an indication of the physical development of these twelve-year-old boys, we shall take standing height as a definite anatomical measure, and tapping speed of the right hand as a definite measure of motor development. The accompanying table shows the distribution of these boys in the various grades, and their average height and muscular speed by school grade. In figures 2 and 3, the same facts are shown graphically. With a single exception—grade five to six—height increases from grade to grade. Without any exception, muscular speed increases from the first grade to the eighth. The boys in the eighth grade are 11 per cent taller than the boys of the same age in grade one. Their muscular speed is 17 per cent greater.

TABLE I. AVERAGE HEIGHT AND AVERAGE MUSCULAR SPEED, BY GRADES.

Grade	Cases	Av. ht., cm.	Av. musc. sp.
I	4	134	143
II	4	139	151
III	14	145	154
IV	17	146	161
V	39	147	163
VI	13	146	165
VII	18	148	166
VIII	3	149	167

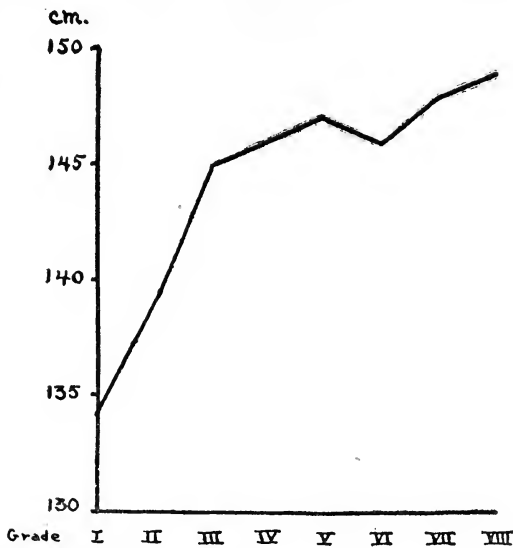


Fig. 2. Average height, by grades.

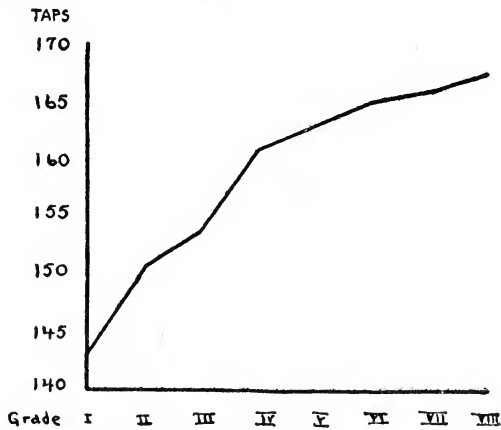


Fig. 3. Average muscular speed, by grades.

The number of twelve-year-olds included in this study is not large enough to warrant extensive generalization. But a very strong presumption of a close physical and mental correspondence in development is certainly warranted.

On *a priori* grounds such correspondence is to be expected. The growth and development of the nervous system is a part of the growth and development of the body as a whole. It would, indeed, be strange if there were no relation or correspondence between them.

Granting that in the case of children there is a close relation between mental and physical development, it does not follow that in adults there is any relation between size of body and mental capacity. No one has ever established any such relationship. The organization and development of the central nervous system, on which mental capacity depends, is not, so far as any one knows, dependent upon size of body or any other definite physical characteristic. It is possible that it has some relation to muscular speed and muscular co-ordination. But such a relation has never been established. The fact probably is that different degrees of mental capacity are found associated with all kinds of physical characteristics without any definite relationship.

If one should study several thousand twelve-year-old children as he finds them in the schools, he would no doubt find in every grade children of tall stocks, of medium tall stocks, and of short stocks. Nevertheless, the average of any physical measure would probably increase roughly from grade to grade.

If the conclusion to which this study points is correct, physical measures should prove helpful in mental diagnosis. But in the study of an individual child, we can not depend upon a comparison of the child with physical age norms, but must consider the physical characteristics of the stock to which the child belongs. For example, an eight-year-old child might be taller than the average of eight-year-old children and still be underdeveloped physically when compared with what an eight-year-old child of his hereditary stock ought to be.

A STATISTICAL STUDY OF 102 TRUANTS.

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INTRODUCTION

The purpose of this study is to present certain facts concerning the personal history, heredity, and environment of 102 boys who had been habitual truants prior to their commitment to Whittier State School, Whittier, California. These boys constitute all the cases of habitual truancy among the 242 boys who have been committed from Los Angeles County (Calif.) and who have attended this school between October, 1915 and January, 1918.

These truants represent highly selected cases, not only because they have been committed to an industrial school, but also because they present problems of wilful and persistent truancy rather than of non-attendance. Abbott and Breckinridge (1) have estimated that in Chicago only five per cent of non-attending children are truants. In Los Angeles Lickley (6) found that "only a small percentage of the entire number (of boy truants) are to be classed as wilful cases of truancy." Likewise, among Los Angeles truant girls, Miss Dunham (3) states that there were 43 "wilful" cases out of 194 "kept out" cases.

Table I shows an age distribution of the 102 Whittier State School boys having a history of truancy, and compares these cases with 470 unselected delinquents, who have been committed to this school.* A smaller per cent of delinquents with a history of truancy than of unselected delinquents have been committed under the age of ten years. Many of the latter were committed as dependents, which may account for this difference. At years 13, 14, and 15 there was a larger percentage of commitments among the truancy cases. As very few delinquent boys are committed with truancy as the principal offense, this has no particular significance. In both groups the median age is at fourteen years.

* Information concerning these 470 delinquents for this and following tables has been taken from Journal of Delinquency Monograph No. 1—The Intelligence of the Delinquent Boy, by J. Harold Williams. These cases represent a cross-section of the whole Whittier State School population for a series of years.

Table II classifies the truants according to race as White, Colored, or Mexican-Indian (i. e., Mexicans having Indian blood), and compares them with the 470 delinquents. Of the truants 64.8 per cent are White, 24.4 per cent Colored, and 10.8 per cent Mexican-Indian. When compared with the unselected delinquents it is seen that there is a larger proportion of Colored, and fewer White and Mexican-Indian boys among the truants. This is at least partially accounted for because the Negro population of Los Angeles is relatively larger than that of California as a whole.

TABLE I. AGE OF 102 TRUANTS AND 470 DELINQUENTS AT TIME OF COMMITMENT.

Age yrs.-mos.	Truants		470 Delinquents	
	No.	%	No.	%
Under 10	1	1.0	20	4.3
10-0 to 10-11.....	5	4.9	19	4.0
11-0 to 11-11.....	6	5.9	22	4.7
12-0 to 12-11.....	11	10.8	49	10.3
13-0 to 13-11.....	18	17.6	60	12.6
14-0 to 14-11.....	24	23.5	96	20.3
15-0 to 15-11.....	25	24.5	102	21.6
16-0 to 16-11.....	7	6.9	47	10.0
17-0 to 17-11.....	4	3.9	30	6.4
18-0 to 18-11.....	1	1.0	22	4.7
19 and over .....	.....	.....	5	1.1
Totals	102	100.0	470	100.0

TABLE II. RACE OF 102 TRUANTS; OF 470 DELINQUENTS.

Race	Truants		470 Delinquents	
	No.	%	No.	%
White	66	64.8	341	72.6
Colored	25	24.4	58	12.3
Mexican-Indian	11	10.8	71	15.1
Totals	102	100.0	470	100.0

DELINQUENT CONDUCT

As has been stated, very few of the 102 boys, who are the subject of this study, have been committed principally because of their truancy. They had been truant before committing the offense for which they were sent to the State School. Dr. Healy (5) has said, "Youthful vagabondage, truancy, is well called the kindergarten of crime." A study of the personal history and pre-adolescent conduct of these boys indicates that playing truant is one of the first forms

of delinquent conduct. Boys who have become truants from home or school are to be considered as potentially delinquent.

Table III gives a list of the principal offenses of the truants, by race, and compares them with the 470 unselected delinquents. Fig. 1 illustrates the principal offenses of the truants. Burglary refers to

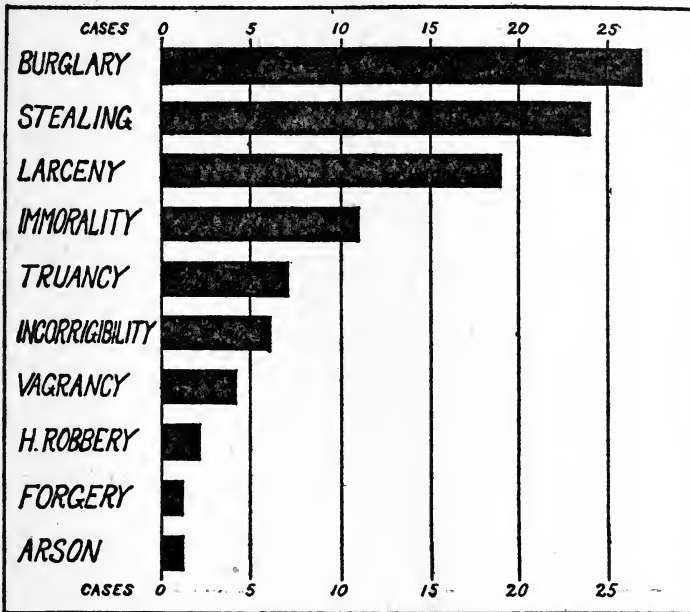


Fig. 1. Principal offenses of the 102 truants.

TABLE III. PRINCIPAL OFFENSES OF 102 TRUANTS BY RACE; OF 470 DELINQUENTS.

Offenses	White	Colored	Mex.-Ind.	Total		470	
	Truants	Truants	Truants	Truants	Delinquents		
	No.	No.	No.	No.	%	No.	%
Burglary	18	5	4	27	26.4	110	23.4
Stealing	13	6	5	24	23.5	114	24.3
Larceny	13	5	1	19	18.6	49	10.4
Sex immorality	9	2	---	11	10.8	42	8.9
Truancy	3	3	1	7	6.9	21	4.5
Incorrigibility	5	1	---	6	5.9	36	7.7
Vagrancy	2	2	---	4	3.9	25	5.3
Highway robbery	2	---	---	2	2.0	8	1.7
Forgery	---	1	---	1	1.0	14	3.0
Arson	1	---	---	1	1.0	5	1.1
Other offenses	---	---	---	---	---	46	9.7
Totals	66	25	11	102	100.0	470	100.0

cases where it has been necessary for the thief to "break in"; offenses classified as larceny were so designated by the Court and include both petty larceny and grand larceny; stealing refers to thefts which have not been declared to be larceny. The three offenses of burglary, stealing, and larceny together constitute nearly 70 per cent of the principal offenses of both the truants and the 470 delinquents. Truancy, as a principal offense, is fifth on the list. The racial classification of the truants shows that practically the same ratio holds good among the Mexican, Colored, and White boys. It is interesting to note that 3 of the 25 Colored truants had truancy as the principal offense. This is a larger proportion than for the White or Mexican truants, but there are too few cases under consideration to draw any conclusions in this regard. The offenses classified as "Other Offenses" of the 470 delinquents consist of dependency, drunkenness, and murder.

Each of the 102 delinquent boys having a history of truancy had committed several offenses before being sent to Whittier State School. Table IV gives the total number of offenses committed by these boys. Next to truancy, which has been an offense of each boy, we find 64 boys have stolen, 42 have committed larceny, 40 have been incorrigible, 34 have committed burglary, 24 have been sexually immoral, and 15 have been vagrant. Other offenses were highway robbery, 3; forgery, 3; drunkenness, 2; and assault, 1. There were a total of 330 distinct offenses committed by these 102 truant boys.

TABLE IV. TOTAL OFFENSES OF THE 102 TRUANT BOYS—BY RACE.

Offenses	White	Colored	Mex.-Ind.	Totals
Truancy	66	25	11	102
Stealing	37	18	9	64
Larceny	28	12	2	42
Incorrigibility	29	10	1	40
Burglary	21	8	5	34
Sexual immorality	19	4	1	24
Vagrancy	8	4	3	15
Highway robbery	3	---	---	3
Forgery	1	2	---	3
Drunkenness	2	---	---	2
Assault	---	---	1	1
Totals	214	83	33	330

Table V gives the number of offenses committed by each truant. Each offense has been counted but once no matter how many times a boy has, for example, stolen or played truant. The median number for the total and for each race appears at three offenses. One white boy had committed six distinct offenses.

TABLE V. NUMBER OF OFFENSES COMMITTED BY EACH TRUANT—BY RACE.

No. of offenses	White	Colored	Mex.-Ind.	Totals
1	---	---	---	---
2	13	2	3	18
3	29	13	4	46
4	19	8	3	39
5	4	2	1	7
6	1	---	---	1
Totals	66	25	11	102

Information concerning the prevalence of the use of alcohol, tobacco, and profanity among these 102 truant boys before commitment is given in Table VI. About 25 per cent have used alcoholic liquors, 62 per cent have used tobacco, and 90 per cent have used profane language. The same ratio obtains for each of the racial groups.

TABLE VI. HISTORY OF ALCOHOL, TOBACCO, AND PROFANITY.

	White	Colored	Mex.-Ind.	Totals
Used alcoholic liquor	13	8	3	24
Used tobacco	44	13	6	63
Used profane language	59	23	10	92
Total number of truants	66	25	11	102

INTELLIGENCE

Each of the 102 boys has been given a mental examination by Dr. J. Harold Williams, Director of Research, Whittier State School. The Stanford Revision of the Binet-Simon Intelligence Scale was used in all cases. The grade of intelligence is usually expressed by the use of the intelligence quotient (I. Q.), which is the ratio between mental age and chronological age. It has been found by Dr. Lewis M. Terman (9) and other investigators, that the intelligence quotient remains practically constant between the chronological age of 10 and 16 years and is therefore a valid and practical expression of a child's intellectual status. In Table VII the intelligence quotients of the 102 truant boys have been arranged in groups of five points each. The median I. Q. for all cases and for the colored boys appears at .75-.79; for the Mexican-Indians at .70-.74; and for the white boys at .80-.84.

When an I. Q. is below .75 the person in question is usually found to be feeble-minded; when between .75 and .82, borderline; between .82 and .92, dull-normal; between .92 and 1.08, average-normal; and over 1.08, superior. There is no sharp line of demarcation between groups, hence we find a slight overlapping of I. Q.'s in the upper and lower limits of each group. In classifying doubtful cases, the social test of the individual's ability to conduct himself and his affairs with ordinary prudence, and of competing on equal terms with normal persons, has been applied. Field-workers obtain data for this decision by interviewing parents, teachers, probation officers, medical examiners and others, and by studying the personal history of the individual in question.

TABLE VII. INTELLIGENCE OF 102 TRUANTS—BY RACE.

I. Q.	White	Colored	Mex.-Ind.	Totals
.55-.59	3	2	1	6
.60-.64	3	3	1	7
.65-.69	6	1	2	9
.70-.74	7	5	2*	14
.75-.79	10	5*	3	18*
.80-.84	11*	3	---	14
.85-.89	7	2	1	10
.90-.94	9	1	---	10
.95-.99	2	2	1	5
1.00-1.04	5	1	---	6
1.05-1.09	1	---	---	1
1.10-1.14	1	---	---	1
1.15-1.19	1	---	---	1
Totals	66	25	11	102

Table VIII gives a classification of the 102 boys by race and compares them with the 470 unselected delinquents. 17.7 per cent of the total number of boys with a truancy record were normal or superior. Of the 18 boys in these two classes 14 were White, 3 Colored, and 1 Mexican-Indian. There is a slightly larger proportion of boys of normal intelligence among the unselected delinquents. The truant group has a higher percentage of mentally defective boys, while the proportion of feeble-minded and borderline cases is much higher among the Mexican-Indian and Colored than among the White boys.

The proportion of mental defect among these boys is much greater than among unselected school children. Dr. Terman (9) states that "not far from 2 per cent of the children enrolled (in the schools)

*—median Intelligence Quotient.

have a grade of intelligence which, however long they live, will never develop beyond the level which is normal to the average child of 11 or 12 years." In a recent survey of exceptional children, Dr. Williams (10), estimated that "the proportion of feeble-minded children in the Santa Ana (Calif.) schools is between 1 and 2 per cent of the school enrollment". Fig. 2 illustrates the degree of intelligence found among 2000 unselected school children by Dr. Terman and that appearing among the 102 truants.

TABLE VIII. INTELLIGENCE CLASSIFICATION OF THE 102 TRUANTS AND 470 DELINQUENTS BY RACE

Classification	White		Colored		Mex.-Ind.		Totals	
	No.	%	No.	%	No.	%	No.	%
Superior	2	3.0	....	0.0	....	0.0	2	2.0
Average-normal	12	18.9	3	12.0	1	9.1	16	15.7
Dull-normal	17	25.8	4	16.0	1	9.1	22	21.6
Borderline	16	24.2	5	20.0	4	36.4	25	24.5
Feeble-minded	19	28.1	13	52.0	5	45.4	37	36.2
Totals	66	100.0	25	100.0	11	100.0	102	100.0

102 Truants.

Classification	White		Colored		Mex.-Ind.		Totals	
	No.	%	No.	%	No.	%	No.	%
Superior	13	3.8	....	0.0	1	1.4	14	3.0
Average-normal	82	24.1	5	8.5	3	4.2	90	19.2
Dull-normal	78	22.9	12	20.7	7	9.8	97	20.6
Borderline	88	25.8	19	32.8	21	29.6	128	27.2
Feeble-minded	80	23.4	22	38.0	39	55.0	141	30.0
Totals	341	100.0	58	100.0	71	100.0	470	100.0

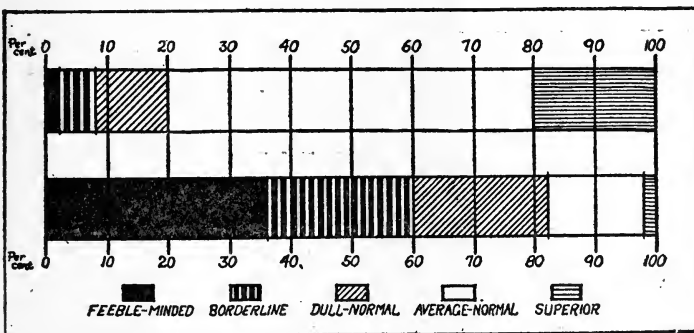


Fig. 2. Intelligence of 2000 non-selected children (above) and the 102 truants (below).

EDUCATION AND SCHOOL PROGRESS

As would be expected among a group of boys who have been habitually truant from school and who show a large amount of mental deficiency, most of these boys are retarded in school. Mr. James S. Hiatt (5), Secretary of the Public Education Association, Philadelphia, writes that "There is an important relation between retardation in school progress and chronic truancy."

In Table IX the grade reached in school at time of commitment has been distributed by age at time of commitment. All of these boys were living in Los Angeles County at the time of commitment and the great majority in Los Angeles City. A few of the older boys were not attending school at the time of commitment. The table serves its purpose in showing the great amount of retardation found among these cases. Numbers above the heavy line represent the cases at or above normal grade for age; those below broken line are retarded over two years. About 30 per cent of the boys were retarded over two years; only 20 per cent were at or above the normal grade for their age. The median age is found at 14 and the median grade at VI, which gives an average retardation of two years.

TABLE IX. GRADE REACHED AT SCHOOL—AGE AT TIME OF COMMITMENT.

Age Grade	8	9	10	11	12	13	14	15	16	17	18	Totals
X	-	-	-	-	-	-	1	-	-	-	-	1
IX	-	-	-	-	-	-	-	1	1	-	-	2
VIII	-	-	-	-	-	1	6	9	2	-	-	18
VII	-	-	-	-	-	2	5	5	1	-	1	14
VI	-	-	-	-	3	7	7	3	3	-	-	23
V	-	-	-	2	3	3	3	2	-	2	-	15
IV	-	-	3	1	4	4	1	3	-	1	-	17
III	1	-	1	3	1	-	-	1	-	1	-	8
II	-	-	1	-	-	1	1	1	-	-	-	4
I	-	-	-	-	-	-	-	-	-	-	-	0
Totals	1	0	5	6	11	19	24	25	7	4	1	102

There is no doubt that many of these boys were unable to do the work of the grade in which they were placed. This is indicated by the results of standardized educational tests which have been given to boys committed to the State School in order that they may be placed properly in school. These tests are particularly valuable in that they apply objective standards, eliminate personal opinion, and allow comparison with large groups of ordinary school children.

Several of the 102 truants have been given educational tests in various grammar school subjects, as shown in Table X. Although the number of tests given are relatively few, a larger number would probably follow the same frequency distribution. The numbers above the heavy line indicate cases which test to or above normal grade for age; those below the broken line show a retardation of over two years. It is seen that there are very few cases which test to normal. A brief discussion of the results in each subject is given below.

Arithmetic. Tests in arithmetic were given to 30 of the truant boys by the Woody Scale, Starch Scale, or Courtis tests. None tested normal; 4 were retarded less than two years; 26, or 85 per cent, were retarded more than two years. The median grade is IV,—normal for a ten year old boy or girl.

Composition. The Hillegas Composition Scale has been given to 20 boys. Two tested normal; 6 showed a retardation of less than two years; 12, or 60 per cent, were retarded over two years. The median grade is VI,—normal for a twelve year old child.

Handwriting. The Thorndike Handwriting Scale was given to 15 boys. None tested normal; 3 were retarded less than two years; 12, or 80 per cent, were retarded more than two years. The median grade is IV,—normal for ten year old children.

Reading. A Thorndike Reading Scale has been given to 18 boys. None tested normal; 2 showed a retardation of less than two years; 16, or 89 per cent, were retarded over two years. The median grade is IV,—normal for ten year old children.

Spelling. Spelling tests, using the Ayres Scale, were given to 25 boys. One tested above normal for age; 8 were retarded less than two years; 16, or 64 per cent, were retarded more than two years.

These tests show that there is actually a more marked retardation than the age-grade distribution (Table IX) indicated. An arrangement of the grade reached in school, or the school ability as shown

TABLE X. ABILITY IN SCHOOL SUBJECTS AS DETERMINED BY EDUCATIONAL TESTS.

Subjects and Scales used.	Age Grade	12	13	14	15	16 and over	Totals
Arithmetic	VIII	-	-	-	1	-	-
	VII	-	-	-	1	-	1
Woody Scale	VI	-	-	-	2	1	3
Starch Scale	V	-	2	1	2	3	8
Courtis Tests	IV	1	1	1	2	-	5*
	III	1	-	2	4	-	7
	III-	-	1	2	1	2	6
Totals		2	4	6	12	6	30
Composition	VIII-	-	-	-	1	-	1
	VIII	-	-	-	1	1	2
Hillegas Scale	VII	-	1	1	1	-	3
	VI	-	1	1	1	1	4*
	V	-	-	-	1	-	1
	IV	-	1	1	-	-	2
	III	1	-	-	2	1	4
	III-	1	-	-	-	2	3
Totals		2	3	3	7	5	20
Handwriting	VIII	-	-	-	-	-	-
	VII	-	-	-	1	-	1
Thorndike Scale	VI	-	-	1	-	1	2
	V	1	-	1	1	-	2
	IV	-	1	1	1	-	3*
	III	1	-	2	-	1	4
	II	-	1	-	1	-	2
	I	-	-	-	-	1	1
Totals		2	2	4	4	3	15
Reading	VI	-	-	-	-	-	-
	V-	-	1	-	-	-	1
Thorndike Scale	V	-	-	-	2	1	3
	IV-	-	1	-	-	2	3
	IV	-	-	-	1	1	2*
	IV-	-	1	3	4	1	9
Totals		-	3	3	7	5	18
Spelling	VIII	-	1	-	1	3	5
	VII	-	-	1	-	-	2
Ayres Scale	VI	-	1	1	2	1	5
	V	-	-	-	1	-	1*
	IV	-	1	2	-	1	4
	III	1	-	-	2	-	3
	III-	1	1	1	1	1	5
Totals		2	4	5	8	6	25

* -- median grade

by the educational tests, by mental age rather than chronological age would have given a much closer correlation.

HEREDITARY INFLUENCES

In addition to studying the personal history and environmental conditions, field-workers of the department of research investigate the heredity of boys committed to Whittier State School. Table XI gives the number of individuals in the 99 families of the 102 truant (3 families, 2 Mexican-Indian, and 1 White, each had 2 boys with a history of truancy committed to this School) concerning whom information has been obtained. There is an average of 26.8 individuals for each family history while the number varies from one in the case of foundlings, concerning whose parents no information is obtainable, to over a hundred among the larger histories. The family histories average about 2 generations, although 4, 5, and 6 generations are found in 36 of the 99 histories.

TABLE XI. NUMBER OF INDIVIDUALS IN TRUANTS' FAMILY HISTORIES CONCERNING WHOM INFORMATION HAS BEEN OBTAINED—BY RACE.

	White	Colored	Mex.-Ind.	Totals
No. of families	65	25	9	99
No. of individuals	1953	529	167	2649
Av. No. per family	30.0	21.1	18.5	26.8

Intelligence. To be sure that a person is feeble-minded, it is necessary to know—(a) that he is of low intelligence, (approximately 25 per cent retarded for his age), and that this is mental and not educational retardation; (b) that this condition has existed from birth or from an early age; and (c) that he is socially and industrially incompetent. Thus we have the definition adopted by the English Royal Commission on Mental Deficiency (9) "A feeble-minded person is one who by reason of mental defect existing from birth or from an early age, is unable to manage himself or his affairs with ordinary prudence, or to compete on equal terms with his fellows". Conversely, a normal person is one who is able to manage himself and his affairs with ordinary prudence, and to compete on equal terms with his fellows.

Among 300 families of delinquents committed to Whittier State School, Dr. Williams (13) states that 635 individuals, or 66.8 per cent, are known to be of normal intelligence; 17, or 1.8 per cent, superior; and 298, or 31.4 per cent, feeble-minded.

Table XII gives the intelligence classification of 638 members

of the truants' families concerning whom sufficient data are available to classify them. In many cases the Binet-Simon Intelligence Scale has been given and in all cases the psychological-historical-social test referred to above has been applied. Referring to the figures given in the total column it is seen that 1.1 per cent have been classified as of superior intelligence, 69.4 per cent as average-normal, 4.5 per cent as dull-normal, 8.8 per cent as borderline, and 16.2 per cent as definitely feeble-minded. Among the Colored and Mexican-Indian families there are none of superior intelligence while the proportion of feeble-mindedness is much higher than among the Whites. The percentages are illustrated by Fig. 3. Although psychological tests have been applied to large numbers of soldiers in several cantonments, and would afford valuable statistical data for comparative purposes, the results are not available at present for the

TABLE XII. INTELLIGENCE OF MEMBERS OF TRUANTS' FAMILIES—BY RACE.

Intelligence Classification	White		Colored		Mex.-Ind.		Totals	
	No.	%	No.	%	No.	%	No.	%
Superior	7	1.3	---	0.0	---	0.0	7	1.1
Average-normal	373	75.8	53	49.4	17	44.8	443	69.4
Dull-normal	22	4.4	6	5.5	1	2.6	29	4.5
Borderline	44	8.9	9	8.1	2	5.2	55	8.8
Feeble-minded	47	9.6	39	37.0	18	47.4	104	16.2
Totals	493	100.0	107	100.0	38	100.0	638	100.0

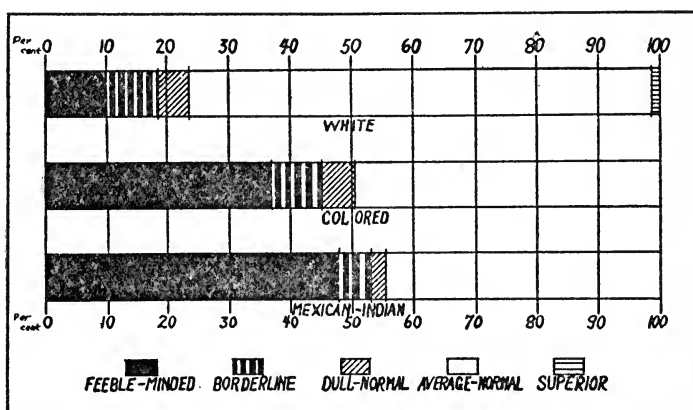


Fig. 3. Intelligence classification of members of truants' families—by race.

general public. The members of these families probably show a higher proportion of mental defect than would be found among unselected cases, but are representative of the mental condition of the families of the delinquent and dependent boys committed to Whittier State School.

Family traits and characteristics. Table XIII gives the number of families in which certain traits or characteristics appeared and the total number of individuals showing these conditions. They have been distributed by races although the number of families, especially among the Colored and Mexican-Indian groups, is too small to draw any conclusions regarding racial variation. Among each of the racial groups a relatively close proportion is found in each of the conditions given. The list of traits does not include, by any means, all the unfavorable circumstances found among these families. History of pauperism, suicide, drug-using, and venereal disease are examples of other conditions which appear in the family histories. On the other hand many individuals, having good moral character and showing no trace of hereditary defect, are found.

TABLE XIII. OCCURRENCE OF CERTAIN TRAITS AND CHARACTERISTICS IN TRUANTS' FAMILIES—BY RACE.

	White		Colored		Mex.-Ind.		Totals	
	No.	Fam.	No.	Fam.	No.	Fam.	No.	Fam.
History of								
Delinquency*	65	130	25	41	9	15	99	186
Alcoholism	40	84	16	32	5	13	61	129
Excitability	37	93	6	16	1	2	44	111
Sex immorality	27	54	8	15	2	3	37	72
Nomadism	17	48	8	19	1	1	26	68
Tuberculosis	16	43	7	7	4	7	27	57
Criminalism	12	16	6	15	1	1	19	32
Insanity	8	11	2	2	1	1	11	14
Epilepsy	1	1	---	---	---	---	1	1
Totals	223	480	79	147	24	43	325	670

Delinquency. In each of the families there has been at least one delinquent, as there has been a commitment to Whittier State School from each family. Individuals who are repeating the early conduct-history of delinquents are considered as potentially delinquent. Cases of this kind found in a family history have been classified under the

* Includes potential delinquency.

"Delinquency" group. The 99 families had 186 cases of delinquency or potential delinquency, an average of two cases for each family.

Alcoholism. In 61 of the 99 families there was one or more histories of alcoholism, with a total of 129 cases. Some family histories show as many as ten individuals who have used liquor to excess.

Excitability. Forty-four families contained 111 individuals who showed an extremely nervous temperament, or excitability. This is an hereditary trait according to Dr. Davenport (2).

Sexual Immorality. Histories of sexual immorality, often of prostitution, have been found among 72 individuals of 37 families.

Nomadism. The wandering impulse, or nomadism, is an hereditary racial character, according to Dr. Davenport (2). Dr. Williams (11, 13) states that hereditary nomadism is an important factor in delinquency and probably accounts for much habitual truancy. A definite history of nomadism is found among 68 individuals of 26 families.

Tuberculosis. Fifty-seven individuals in 27 families had a history of tuberculosis.

Criminalism. Thirty-two individuals of 19 families showed criminalistic tendencies. This number does not include cases of delinquency, which would have been considered criminalistic had the offender been an adult.

Insanity. In 11 of the 99 families, there were 14 individuals who were insane.

Epilepsy. There was only one epileptic found in studying family histories of these truant boys, although there were several cases showing epileptic tendency. Epileptic boys may not be committed to Whittier State School.

There is a total of 670 traits appearing among the 99 families, as shown by Table XIII. Table XIV gives the number of different traits and characteristics found in each family, by race. The median number of traits is three for the total and for each racial group. Over 85 per cent of the families showed from two to five different traits. One white family showed eight of the conditions mentioned in Table XIII. Fig. 4 illustrates the number of different traits and characteristics shown by the 99 families of truant boys.

TABLE XIV. NUMBER OF DIFFERENT TRAITS AND CHARACTERISTICS IN EACH FAMILY—BY RACE.

Number of Traits	White	Colored	Mex.-Ind.	Totals
1	3	3	2	8
2	16	5	2	23
3	17*	7*	3*	27*
4	15	5	1	21
5	10	5	1	16
6	2	----	----	2
7	1	----	----	1
8	1	----	----	1
Totals	65	25	9	99

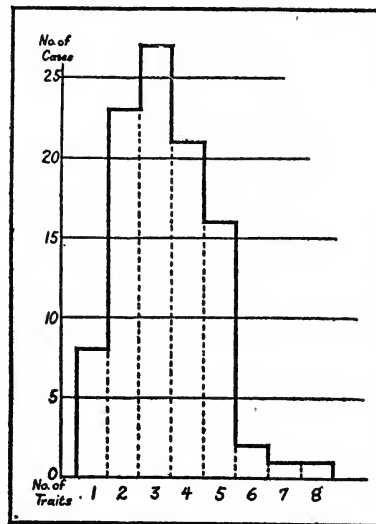


Fig. 4. Number of different traits and characteristics in each truant's family.

ENVIRONMENTAL CONDITIONS

The results of field work investigation of home and neighborhood conditions of the 102 truant boys are summarized in this section. Many writers are inclined to place the responsibility for such problems as truancy and delinquency on home conditions. In a recent study of the family conditions of a large number of delinquent boys in the United States, Shideler (8) found that the parental conditions of about one-half (50.7 per cent) of the boys were abnormal,—having one or both parents dead or separated or divorced. “Rough esti-

mates concerning the same facts as to the total child population of the United States are as follows: Children having one parent not living, 16 per cent; children having lost parent by divorce, separation, and desertion, 3.3 per cent; orphans and other abnormal, 6 per cent; total having abnormal parental conditions, 25.3 per cent."

In Table XV it is seen that a higher percentage (68.6 per cent) of the 102 truants have abnormal parental conditions than obtains among a large number of delinquents in the United States, as given by Mr. Shideler. In about one-third of the cases, the parents are living together, in one-third they are divorced, separated, or deserted, and in the remainder, one or both are dead. 24.5 per cent of the boys have step-fathers and 7.8 per cent have step-mothers. Over one-half of the fathers were intemperate, while liquor was used by eight of the mothers.

TABLE XV. PARENTAL CONDITIONS OF TRUANTS.

Parental Conditions	No. Cases	%
Parents living together	32	31.4
Father dead	18	17.6
Mother dead	14	13.7
Both parents dead	4	3.9
Parents divorced, separated, or deserted	34	33.4
Totals	102	100.0
Normal	32	31.4
Abnormal	70	68.6
Totals	102	100.0
Having step-father	25	24.5
Having step-mother	8	7.8
Father intemperate	54	52.9
Father temperate	42	41.2
Unknown	6	5.9
Totals	102	100.0
Mother intemperate	8	7.8
Mother temperate	88	86.3
Unknown	6	5.9
Totals	102	100.0

A scale for grading home conditions has been devised by Dr. J. Harold Williams (12) which is used in classifying the homes of boys committed to Whittier State School.

In using the scale, the field-worker visits the home of the boy and secures data concerning it from parents, relatives, teachers, and others, and by personal observation. This information is classified by five main heads under each of which five points are considered, as follows: (I) **Necessities—**

(a) income, (b) food and clothing, (c) shelter, (d) furnishings, (e) comforts; (II) **Neatness**—(a) interior sanitation, (b) interior arrangement, (c) exterior sanitation, (d) exterior arrangement, (e) use of equipment; (III) **Size**—(a) accommodation, (b) arrangement, (c) convenience, (d) number of residents, (e) exterior; (IV) **Parental conditions**—(a) intelligence, (b) harmony, (c) reason for separation, (d) presence at home, (e) adjustments due to absence of one or both parents; (V) **Parental supervision**—(a) interest in children, (b) methods of discipline, (c) equality of treatment, (d) parental example, (e) extension of supervision. Each item is graded on a scale of points from 1 to 5 inclusive by comparing its quality with that of a large number of samples of each grade on the standard score sheet. When the five items have been graded, the scores are added; this total constitutes the Home Index.

Sixty-seven homes of the 102 truants have been graded by the Whittier Scale for Grading Home Conditions. Table XVI gives the grades of the five items. Grade 1 represents a very inferior condition in the item under consideration, grade 5 indicates a superior con-

TABLE XVI. GRADE OF TRUANTS' HOMES BY ITEMS OF WHITTIER SCALE FOR GRADING HOME CONDITIONS.

Grade (points)	1	2	3	4	5
Necessities	11	12	28	7	9
Neatness	13	6	13	9	26
Size	6	11	21	12	17
Parental conditions	13	26	13	8	7
Parental supervision	38	10	14	4	1
Totals	81	65	89	40	60

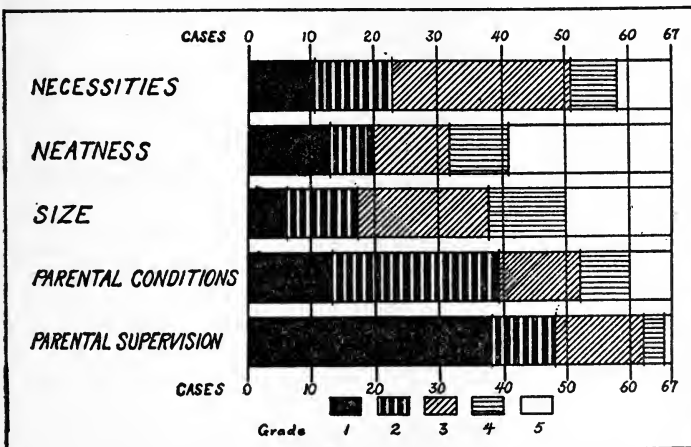


Fig. 5. Distribution of item-grades of homes of 67 truants, as indicated by the Whittier Scale for Grading Home Conditions.

dition, while 2, 3, and 4 are intermediate. It is seen by this classification that there is a great variability in the home conditions of these boys. The relatively large number of homes grading 1 and 2 in the items, parental conditions and parental supervision, indicate a poor quality of parental control. Fig. 5 gives a distribution of the item-grades of 67 homes of the truant boys.

The indices of the same homes (the total of the grades received from the five items gives the home index) have been distributed by races in groups of five points in Table XVII. The median index for the total and for each racial group is found in the 10-14 group. The range of the home indices of these homes indicate a great variability of conditions.

TABLE XVII. INDEX OF TRUANTS' HOMES—BY RACE.

Index	White	Colored	Mex.-Ind.	Totals
5- 9	10	3	----	13
10-14	15	6	2	23
15-19	15	5	----	20
20-24	7	4	----	11
Totals	47	18	2	67

The Whittier Scale for Grading Neighborhood Conditions (14) has been used in classifying 66 neighborhoods of the 102 truant boys

This scale is used in the same way as the scale for grading home conditions, referred to above. The neighborhood is visited and information secured concerning the following items: (I) **Neatness, sanitation, improvements**—(a) arrangement of homes, (b) cleanliness of homes, (c) streets and alleys, (d) light and water, (e) transportation and communication facilities; (II) **Playground facilities**—(a) extent, (b) adaptability, (c) equipment, (d) accessibility, (e) popularity; (III) **Institutions and establishments of moral consequence**—(a) educational, (b) moral, (c) non-effective, (d) industrial, (e) immoral; (IV) **Social status of residents**—(a) education, (b) morality, (c) occupation, (d) diligence, (e) conduct; (V) **Average quality of homes**—using propositus' home as a basis, estimate average plus or minus quality of other homes. Each main item is graded on a scale of 1 to 5 points by comparing its quality with that of a large number of graded samples on the standard score sheet. The sum of the item-grades constitutes the Neighborhood Index.

Table XVIII gives a classification of the neighborhood grades of 66 truants' homes by items. Grades 1 and 5 represent inferior and superior conditions, respectively. The great majority of neighborhoods grade 2, 3, or 4, which represent intermediate conditions.

"Social Status of Residents" is the item having the lowest average grade, but even here there is a wide distribution of scores. Fig. 6 illustrates the item-grades of these 66 neighborhoods.

TABLE XVIII. GRADE OF NEIGHBORHOOD OF 66 TRUANTS' HOMES BY ITEMS OF WHITTIER SCALE FOR GRADING NEIGHBORHOOD CONDITIONS.

Grade (points)	1	2	3	4	5
Neatness, sanitation, improvements	---	7	22	32	5
Playground facilities	4	11	15	32	4
Institutions and establishments	2	12	21	28	3
Social status of residents	3	13	28	21	1
Average grade of homes	---	6	26	26	8
Totals	9	49	112	139	21

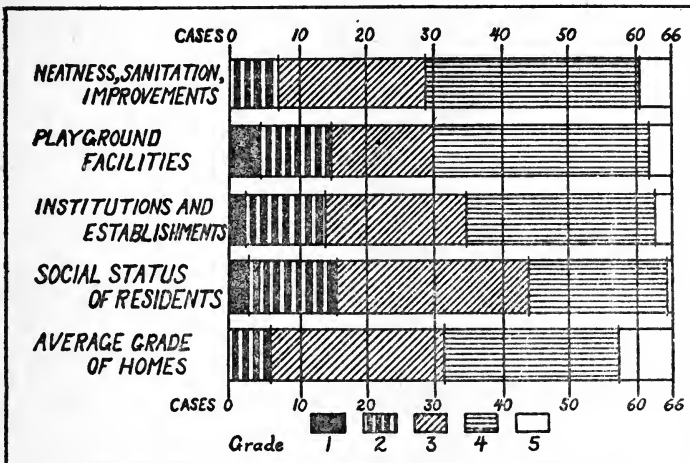


Fig. 6. Distribution of item-grades of neighborhoods of 66 truants, as indicated by the Whittier Scale for Grading Neighborhood Conditions.

The neighborhood indices have been distributed in groups of five and by races in Table XIX. The median index is found in the 15-19 group for each race and for the total. The range of the indices indicates that these truant boys came from neighborhoods of various grades.

TABLE XIX. INDEX OF TRUANTS' NEIGHBORHOODS— BY RACE.

Index	White	Colored	Mex.-Ind.	Totals
5- 9	2	2	---	4
10-14	8	4	1	13
15-19	23	9	1	33
20-24	13	3	---	16
Totals	46	18	2	66

SUMMARY

The subjects of this study were 102 truant boys who had been committed to Whittier State School from Los Angeles County. They are a highly selected group because they have been committed to an industrial school and have been habitual truants as opposed to non-attendants. The following facts concerning their personal history, heredity, and environment have been developed.

1. Sixty-five per cent of the boys were White, 25 per cent Colored, and 10 per cent Mexican-Indian.

2. Although all were truants, truancy was the principal offense of only 7 per cent of the boys. Burglary, stealing, and larceny together constituted the principal offense of 70 per cent of the cases.

3. Every boy had committed one or more offenses in addition to the one for which he was sent to Whittier, while he may have committed the same offense many times. Eighty per cent had committed three or more different offenses. In addition to the above delinquent acts, 25 per cent had used alcoholic liquor, 62 per cent used tobacco, and 90 per cent used profane language.

4. One-fourth of the White, and one-half of the Colored and Mexican-Indian boys were definitely feeble-minded. Only 17.7 per cent of the total number were of average-normal or superior intelligence.

5. There was a large amount of school retardation among these truants. An age-grade distribution shows that about 30 per cent were retarded over two years, while only 20 per cent were at or above normal grade for age. The amount of retardation is shown to be even greater when standardized educational tests have been applied. In the grammar school subjects in which the boys were tested there was a retardation of over two years in from 60 to 90 per cent of the cases.

6. Members of families of these truant boys have a large amount of mental defect. About 10 per cent of the Whites, 37 per cent of the Negroes, and 47.4 per cent of the Mexican-Indians were feeble-minded. Seventy-one per cent of the total of those classified were of average-normal or superior intelligence. Many of these families show a number of unfavorable or unsocial traits or characteristics. The principal ones are delinquency, alcoholism, excitability, sexual immorality, nomadism, tuberculosis, criminalism, and insanity. Two or

more of these conditions are found among individuals in 90 per cent of the truants' families.

7. In 68.6 per cent of the homes there were abnormal parental conditions, one or both parents being dead, or divorced, separated, or deserted. The fathers were intemperate in one-half of all cases, while 7.8 per cent of the mothers used alcoholic liquors. The homes graded by the Whittier Scale for Grading Home Conditions indicates that boys have come from homes of various quality, although parental conditions and parental supervision grade low in a large number of cases. The facts shown by grading the neighborhoods from which these boys have come also show a great variety of neighborhood conditions. There is no doubt that home conditions have been an important factor in causing the delinquency of many of these truant boys, but the factors of intelligence, school retardation, and heredity have also had a vital influence.

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Vol. III

September, 1918

No. 5

DR. GODDARD AND THE OHIO BUREAU OF JUVENILE RESEARCH.

After twelve years of epoch-making work at the Vineland Training School, Dr. Henry H. Goddard has accepted the directorship of the Ohio Bureau of Juvenile Research at a salary of \$7,500 per year. In this position Dr. Goddard will reorganize and re-equip the laboratory which has done much useful experimental work under Dr. Thomas H. Haines. The state legislature voted an appropriation of \$100,000 for new buildings for the Bureau.

According to Dr. Goddard's statement, the functions of the Bureau are (1) "To study, diagnose, and recommend treatment (proper institution) for such cases as are sent to the juvenile courts; (2) to study the causes of dependency and delinquency." The statement continues: "For the accomplishment of the plan there will be required the services of clinical psychologists, physicians, social workers, teachers and caretakers. The child must be studied from every angle; not only mental examinations, but physical; not only physical examinations as usually understood, but far more extensive, involving X-ray examinations of all organs that can be so studied, physiological studies of digestion, secretion, excretion, the endocrine system and whatever else may be suspected of containing the secret we seek—the cause of the delinquency."

The state of Ohio is to be congratulated upon securing the services of Dr. Goddard for this important work.

J. H. W.

NO CHILD LABOR IN GOVERNMENT WORK.

The following communication has been recently received:

The National Child Labor Committee looks upon the new ruling of the War Policies Board as a distinct step forward in the effort to obtain protection for American children. This ruling specifies that in all contracts for government work the contractor shall not employ any children in violation of the terms of the federal child labor law which has been declared unconstitutional by the Supreme Court. That is, "The contractor shall not directly or indirectly employ in the performance of the contract any minor under the age of 14 years, or permit any minor between the age of 14 and 16 years to work more than 8 hours in any one day, more than six days in any one week, or before 6 a. m. or after 7 p. m." Owen R. Lovejoy, Secretary of the National Child Labor Committee, in commenting on this ruling said, "The government again puts itself on record as strongly opposed to the employment of children. It is part of the war program that the children must be kept from feeling the effects of the war, either through a lowering of their health, or through loss of education or premature work in factories and mills. The action of the Supreme Court in declaring the federal child labor law unconstitutional left the children without any national measure of protection, and we know that many of them have been sent back to the mills and factories from which they were taken last year, but now that the War Policies Board has automatically restored the provisions of the federal law in all government contracts, we may look forward confidently to success in our effort to obtain a new national law." Julia C. Lathrop, Chief of the Children's Bureau, says with regard to the ruling, "This action affords a large measure of protection and is very encouraging."

REVIEWS

PINTNER, Rudolf and ANDERSON, Margaret M. *The Picture Completion Test.* Educational Psychology Monographs No. 20. Warwick & York. 1917. Baltimore, Md. pp. 125. Price \$1.25. The Healy Picture Completion Test has been applied to 1500 children and the results standardized by the percentile method. A valuable criticism is given of the previous use of the test. Why one particular object must be used to secure a perfect score in the completion of the whole picture does not appear from the discussions of the original author of the test. If the normal performance of the children themselves is a criterion the picture is accurately completed with the insertion of one of several objects. This however applies especially to three of the insertions. The criticism is eminently fair.

The ease or difficulty of the different insertions also comes in for critical analysis and it is clear that variation is the rule. No sex differences are found; children of a school in a poor neighborhood show a lower median performance; in general there is a correlation between the results of this test and school performance; and the median performance of colored children is below that of white children.

This is another excellent scientific work and warrants careful study by the clinical psychologist.

A. H. SUTHERLAND.

DOLL, Edgar A. *Clinical Studies in Feeble-mindedness.* Richard C. Badger, Boston, Mass. pp. 224. Price \$2.50. Planned as a text for reading parallel to a lecture course this book is particularly good as an introduction to the study of the feeble-minded. It should be in the hands of every six week-ish Binet tester as a reminder of the fact that the Binet test (in whatever form or modification) is merely one of the methods to be used. The Psychological, Social, Pedagogical, Medical, Somatic and Hereditary criteria of feeble-mindedness are compared and evaluated and in later chapters are excellently exemplified in case studies. Six cases, ranging from distinctly feeble-minded to borderline cases are portrayed clearly and logically in their

reactions to a variety of tests; each case a type clearly drawn.

A good working bibliography of tests; a glossary of technical terms; and a glossary of performance tests is a thoughtful addition which merits special commendation.

A. H. SUTHERLAND.

BRIGHAM, Carl C. Two Studies in Mental Tests. I. Variable Factors in the Binet Tests. II. The Diagnostic Value of Some Mental Tests. *Psychological Monographs*. Vol. XXIV, No. 1. Psychological Review Co., Princeton, N. J. pp. 254. Price \$2.50. These two excellent studies are worthy the careful attention of every clinical psychologist. They will show to the trainer of Binet testers the absolute necessity of a psychological training in addition to the merely routine knowledge of the single tests. Of the many teachers now employing Binet tests in our schools, few, I am sure, will be able to read these papers with intelligence. Few will read them anyway, since teachers do not attempt to determine the grounds on which they stand and work. In the experience of the writer, they proceed in an attitude of omniscience and omnipotence.

The first of these two studies would tend to undermine the blind routine of their self confidence. It points out, with extreme attention to detail, the variability of the Binet tests, of whatever modification. It shows that both in the giving and the scoring of the series of tests which make up the Binet, there is constant need for the exercise of judgment; that, after all, the Binet tests in their present use are qualitative and not quantitative.

The diagnostic values of the separate tests are worked out in the second paper and appear in a table (p. 233). In another table (p. 160) they are listed and evaluated under the condition of mental group which they are supposed by the author to test. While the series of tests is considered a "new problem" to be solved by the child, the psychology of the process is not made the subject of a special investigation. When laboratory conditions regain their equilibrium the conclusion of the paper would be a very good point at which to begin a study of the psychology of the Binet test. This has not yet been done satisfactorily.

A. H. SUTHERLAND.

WELLS, Frederick Lyman. *Mental Adjustments*. D. Appleton & Co. 1917. New York. pp. 330. Price \$2.50. The literary leanings of the author are evident on every page of this excellent book. A wealth of illustration critically analyzed makes every point clear even to the reader who is not well versed in Freudian psychology. From the adaptations of unicellular organisms in their relatively simple reactions to food or acid, their lookout for enemies and the continuance of their species; to the complex mental reactions of conviction, pleasure or jealousy in the human being, there is woven a charming pattern of literary composition which will make of this book a source of information and value quite apart from its technical aspects. A singularly good review of the book appears in the Introduction by the editor of the *Conduct of Mind* series, of which this volume is a part.

In contrast to rational symbolism, Wells uses the term effective symbolism, when a thing derives pleasantness or unpleasantness from another thing without being identified with it in any other way. The irradiation of emotional tone fixes the value of many experiences entirely apart from their own constituent values. Association by similarity or temporal contiguity are the chief mechanisms of this irradiation, but they are sometimes remote or even figurative. The original experience is lost to awareness. But the original experience, though lost to awareness may be represented in consciousness by some trend in symbolic association with it. Symbols whose originals are thus dissociated from awareness are termed dissociative symbols. A toy dog is to the old maid who cherishes it, the affective symbol of a human love object. It becomes also a dissociative symbol if her main personality fails to realize, or repudiates, its connection with the original trend. Dream symbolisms are regularly of the dissociative type. And not only has the original experience been lost to awareness but the original experience has lost its emotional value. The affect has been transferred and to this transference Wells gives the term "affective siphoning" in preference to irradiation.

Inherited tendencies to action or "behavior patterns" such as tropisms, reflexes and instincts are embraced under the term "trend." "Awareness" is made the narrower and "consciousness" the wider term. Dissociation is set in contrast to Integration. When a mental complex is broken up and the parts become as independent as respira-

tion and heart beat, they may be spoken of as dissociated.

The justification of new terms lies in their capacity to convey a distinction which would otherwise be hidden in a too general concept. Wells finds that the use of the above terms meets a need.

Especially good is the final chapter on "Balancing Factors" wherein is to be found an array of suggestions for escape from the mental conflicts, inhibitions and blockings which are mainly responsible for pathological dissociations. Under the paragraph on striving for happiness the author makes use of the parable of the good and faithful servant. The stuporous catatonic has hidden his talents in the earth (within himself); the normal man has put his out at interest (applied them to some productive work).

A. H. SUTHERLAND.

PINTNER, Rudolf and PATERSON, Donald G. *A Scale of Performance Tests.* D. Appleton & Company. 1917. New York. pp. 213. Price \$2.00. This volume is unusual in several particulars as a contribution to the literature of clinical psychology. The Introduction is an excellent historical statement of the development of tests up to the present time. A need now arises for tests of reproductive and constructive ability. The second, third and fourth chapters show how the need has been met by variations of the picture completion and form board tests. These are standardized as to method of procedure and also by the establishment of norms of performance. This series of objective performance tests is now available, either as a separate scale, or as a control on other tests in which language is the medium of performance.

The terms in which the results shall be stated receives more than usual critical thought. It is possible to state the results in terms of mental age and while this is an alluring possibility for the future, the median mental age is not yet sufficiently worked out to warrant a limitation of the statement to these terms. The Point Scale also might be applied to the statement of results, but Pintner feels that this method of presentation of results is arbitrary and lacking a sufficiently stable principle. The Yerkes Bridges Scale, and the Haines Point Scale for the Blind are critically analyzed in terms of chronological age and the authors accept Stern's criticism of the Binet as applicable here. Differences of weight in grading the separate tests

are advocated for the Point Scale method as well as for the Binet test.

The percentile method of standardization, for which credit is given to Mrs. H. T. Wooley, is preferred. As Pintner says (p. 186) "this type of standardization is the most thorough and may ultimately prevail over all other types. It allows the finest differentiations and the most just comparisons of an individual with individuals of the same age." Tables of standardization are however presented in each of the above methods and when larger amounts of data are available for comparison, some sort of correlation of this scale with the various forms of the Binet will be possible.

This volume will be an invaluable handbook for the clinical psychologist.

A. H. SUTHERLAND.

HOAG, Ernest B. Mental Examinations of Boys. Reprinted from annual report of Los Angeles County Probation Department for the year ending Dec. 31, 1917. pp. 16-17. A statistical report on 180 official and "an equal number of non-official" examinations made by Dr. Hoag, medical advisor to the Juvenile Court. In most instances both physical and mental examinations were made. In regard to the results of the former, Dr. Hoag states that "In general, the physical condition of these boys was about the same as is found in an equal number of unselected boys of the same age in the public schools. It does not seem probable that there is any close relationship between physical states and delinquent conduct in this group of boys."

The mental conditions, on the other hand, show a close relationship to social irregularities. Many forms of mental instability were found, "varying all the way from adolescent instability of a temporary character to feeble-mindedness, epilepsy and actual insanity The neuropathic basis of delinquency is everywhere discoverable in this group of cases, as it is everywhere in similar groups."

Diagnoses of 180 official examinations (Table I) are given as follows: Normal, 69 cases, 38 per cent; dull-normal, 22 cases, 12.5 per cent; borderline, 22 cases, 12.5 per cent; feeble-minded, 59 cases, 33 per cent; psychopathic, 6 cases, 3 per cent; epileptic, 1 case; insane (dementia praecox) 1 case.

The intelligence of repeaters is apparently higher than that of the group as a whole, Table III showing (of 88 repeaters): normal, 44 per cent; dull-normal, 19 per cent; borderline, 15 per cent; feeble-minded, 20 per cent. This would suggest that the giving of "another chance" is based to some extent upon the findings of intelligence tests. There is a noticeable tendency to place feeble-minded delinquents in immediate custody.

Of 72 boys committed to state industrial schools (Table V) 36 were examined. Of this group 14 were normal, 7 dull-normal, 5 borderline, 9 (25 per cent) feeble-minded, and 1 psychopathic. The most common offenses were stealing, 38 per cent; incorrigibility, 34 per cent; sex immorality, 9 per cent.

Although complete family histories were not obtained, the data led Dr. Hoag to observe that "alcoholism, family discord, poverty, delinquency, and the like, are largely symptomatic of underlying fundamental defects in the mental makeup, manifesting themselves in abnormal conduct and lack of adaptability of various kinds. The remedies applied must suit the individual case and no amount of generalizing in regard to bad environment, lack of discipline, alcoholism, cigarettes, and the like, will lead to any permanent results." Family and developmental histories, he adds, are very necessary for the obtaining of accurate data.

Judge Reeve and the Los Angeles Juvenile Court have taken a leading step in making scientific work an integral part of the court procedure.

J. H. W.

HART, Hornell. *Fluctuations in Unemployment in Cities of the United States, 1902 to 1917. Studies from the Helen S. Trownstine Foundation, Vol. I, No. 2. Cincinnati, May 15, 1918. pp. 59.* This monograph "represents merely a first attempt at a comprehensive quantitative study of unemployment in American cities." The main points of inquiry are (a) the extent of unemployment in other than agricultural occupations during recent years; (b) the seasonal fluctuation of unemployment; and (c) the remedies, with special reference to the probable situation at the close of the war.

For the fifteen year period the author finds an average of 2.5 millions of unemployed workers in the non-agricultural occupations. In 1908 the proportion came to 3.5 millions. In 1917 it dropped to 1.4 millions.

Marked seasonal rythms of demand were noted. Unemployment tends to be greatest in January, averaging three and one third millions, and least in October, averaging less than two millions. The chief causes are apparently related to changes in temperature. In the agricultural occupations the winter months show an enormous increase in unemployment. This has a direct bearing upon numerous social problems, since millions of these farm workers drift to the centers of population without jobs. These seasonal differences, however, cause less social damage than do the periodic depressions. The former occur regularly, and can be allowed for. The latter are irregular, and affect millions in many occupations.

The author refrains from attempting specific predictions with reference to the probable conditions at the close of the war. The indications are, he points out, that "the peace industries of the country are likely to go through a depression in the near future." The proportion of building permits and orders for transportation facilities, both of which dropped off during 1917, accord with these indications. Government work, on the other hand, helped to bring about a balance. The return of thousands of soldiers and sailors to civilian occupations will add another factor to the probable depression.

Among the remedies suggested are (a) increased industrial education, (b) immigration, (c) dovetailing of seasonal industries, (d) wider use of employment exchanges, and (2) adjustment of public work to relieve the slackened condition of labor during depressions. The last named is believed by the author to be most important of all. With increased facilities for research and statistical analysis, fluctuations in the labor market may be predicted far enough in advance so that adaptations could be made.

The Trounstone Foundation is to be congratulated upon the scientific manner in which these important studies are being made.

J. H. W.

COMMUNICATION AND DISCUSSION

The Significance of Expert Testimony.

To the editor: I have read with much interest the article entitled "Expert Testimony in the Case of Alberto Flores" by Lewis M. Terman, Ph. D. of Stanford University. I was pleased to note that the writer had been unusually fair and full in relation to the statement of the facts testified to in the case, which were introduced for the purpose of showing that Flores was an "insane person" and which were not admissible for any other purpose under the law at that time.

I cannot agree with the author in his implied conclusion that the doctor who testified for the state was open to the criticism made by Dr. Terman, because, while he did not adopt the same methods that psychologists use, he is a doctor of unusual experience and has appeared on subpoena by the District Attorney of this county in many cases where insanity has been the defense, and in all except one where he has appeared, if my memory serves me right, convictions were obtained.

It is not the method adopted by the psychologist or physician that appeals to the jury in criminal cases. What appeals to members of the jury is the manner in which the testimony of the expert is given and the personality of the witness. A good many alienists and psychologists are liable to use a great deal of technical language, which, of course, has to be explained by them so that the jury can understand it; and in that way, in the first instance, to use a common expression, they "go over the head" of the average juror. Others are at fault because they assume a superiority that is not noticeable in most other witnesses when testifying, and because they seem to feel personally aggrieved if they are subjected to reasonable cross examination.

The doctor who testified on behalf of the people in the Flores case, at the request of the District Attorney, gave a great deal of time in making observations and taking tests, in his way, for the purpose of determining in his mind whether or not Flores was an "insane person," and not for the purpose of discovering whether he was subnormal. And I will state further that that doctor has refused in more than one instance, after making his tests and examinations, to appear as a witness on behalf of the state, where insanity was made an issue and he was not convinced that the defendant was not insane.

S. E. Crow.

Superior Court,
Santa Barbara, Calif.

The Prison Labor Situation.

To the editor: The growing problem of idleness in state and federal prisons has reached a point where a national crusade is being planned by

penologists to call to the public attention its great dangers. Legislation now before congress, if it is successful, will take industry away from those few prisons that have work enough for their convicts. These will be added to the army of the unemployed, sent to prison under sentence of hard labor, but forced to sit in cells day after day without any possibility of relief.

The present situation is the outgrowth of the prejudice stirred up by the contract labor system. Under this system some politician or other was given a contract to work the prisoners on a nominal return to the state. The profiteer was the sole beneficiary, the state having to go to the tax payers for money to meet the deficit. Labor unions and the public in general properly objected to this system and it has been outlawed. Only a small number of contracts remain and these will not be renewed.

But prejudice having once been awakened, has now gone to unreasonable lengths. When the contract system was rightly put out of existence, the up-to-date prison managements looked forward to state owned, state operated, prison industries to take their place. It was the intention to do away with all unfair conditions of competition such as had raised such objection to the contract system. In place of being exploited, prisoners were to be given a chance to make good and to receive a reward for their labor. Penitentiaries were to be made self-supporting. This was to be accomplished by making an article that could be sold in open competition at the general market price—no price cutting, mind you—but fair competition. From the profits of such industry the expenses would be paid and the prisoners given such wages as this made possible.

But this humanitarian and business-like program was nipped in the bud. In twenty-three states laws were secured—based on a misunderstanding of new conditions and a prejudice remaining from the old—that knocked in the head all progress. The prisons were limited to producing articles for use by the state. Why this meant any less competition than the manufacture of articles to be sold in the market, it is hard to explain. If the prison made goods to supply the state, the state would not buy similar goods produced in private factories. It was six of one and half a dozen of the other, so far as the public was concerned; but it means the difference between really successful reformatory prisons and those of the worst type.

The present Booher-Smith bill is only a repetition of the same old thing. This time it pretends to promote prison manufacture by providing for the making of munitions in prisons. But it would be impossible to equip the prisons as no machinery can be obtained for years. And the joker contained in the bill would bar all prison products from inter-state commerce.

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PERIODICAL LITERATURE

BROWN, PHILIP KING: TRAINING OF NURSES AND SOCIAL WORKERS IN THE PRESENT EMERGENCY. The scarcity of trained nurses and social workers has given rise to a serious situation in providing for the needs of our wounded soldiers. Traditional methods of training nurses must be revised by eliminating much menial labor, providing for greater specialization, and placing the instruction on a scientific educational basis. The nursing field must be broadened so that it may coordinate better with the needs of the community. Under the present system of instruction, the nurse, because of her present limited training and destroyed initiative, has not the executive training and experience in social work that is necessary in public health nursing or social service. The importance of short, intensive, training courses for social workers and nurses should be emphasized. A three months' course in anatomy, physiology, bacteriology, and chemistry, followed by six months of well supervised ward work and a three months' period of operating room discipline, would fit pupil nurses for special training. This would take the form of three months' final training in army or cantonment hospitals before going to the front, if army work were selected; otherwise, special courses which might be given to advantage by hospitals could be continued.—California State Journal of Medicine, June, 1918. Reprint, pp. 1-10. W. W. C.

BUCK, PAULINE, AND HAYNES, H. A.: A HISTORY OF ONE OF MICHIGAN'S NEUROPATHIC FAMILIES. This report, by the psychologist and medical superintendent of the Michigan Home and Training School (Lapeer) deals with a family representative of many which have contributed numerous wards to the state hospitals and training schools. Information was gathered from relatives, teachers, social workers, etc., the field-work consuming five days. The history includes five generations and approximately 100 individuals. Beginning with a prominent family of all normal individuals, marriage with defective stock caused degeneration of subsequent generations. The present family shows cases of delinquency, alcoholism, epilepsy, feeble-mindedness, insanity, sex immorality, dependency, syphilis, and other undesirable traits. Five children of the last generation are patients in the Michigan Home and Training School. This excellent account of the family history is made clear by photographs, illustrations of home conditions, charts, etc. Each important individual is described in detail. "The state offers one effective solution to the problem at the present time, if rigorously carried out, that of segregation."—Public Health (N. S.) VI-7, July, 1918. pp. 241-256. J. H. W.

DOLL, E. A.: PSYCHOLOGICAL MEASUREMENTS OF THIRTEEN PAIRS OF FEEBLE-MINDED SIBLINGS. Observations of research workers at Vineland have led to the belief that brothers and sisters have a considerably closer resemblance to each other than to other children. Data were obtainable on thirteen pairs with reference to certain physical and mental traits. (1) Physical percentiles obtained through anthropometric measurements and tests show an average difference for 7 cases of no more than 20 per cent, and for 4 cases no greater than 5 per cent, which is "quite within the possibility of chance errors of variability." An analysis of comparative psycho-physical and physical capacity, however, shows the resemblance to be not more than 10 per cent in 7 cases and not more than 20 per cent in 11 cases. (2) Binet ages are exactly the same in 2 cases, differ by one point in 2 cases, and not more than 1 year in 7 cases. Considering the probable accuracy of the tests and the variability of the cases, the mental ages may be considered equal. (3) Form-board experiments also indicate a relatively close resemblance of siblings. (4) Observational data, including physical, temperamental, and industrial characteristics, tend to show still closer resemblances. It is planned to add other data from time to time. The writer does not wish to draw specific conclusions from the present data. —Training School Bulletin, XV-3, May, 1918. pp. 45-47. J. H. W.

HARDING, JOHN R.: EPILEPSY AS SEEN IN THE LABORATORY OF A PENAL INSTITUTION. "Epileptic phenomena are the direct outcome of some physical or psychic irritant acting upon an unstable nervous system, which in turn is susceptible to convulsive manifestations; . . . this susceptibility resides largely in the cells of the motor and intellectual areas of the cerebral cortex; . . . the disease is always the result of a vicious heredity." These conclusions have been reached by a study of the personality and life history of epileptics who have been among the entrants at Elmira Reformatory. The technique of the laboratory examinations included (1) a careful physical examination, (2) a general intelligence rating, (3) a psychological examination, (4) a careful study of personal and ancestral histories. The psychological laboratory emphasizes personality, grades mentality, tabulates the kind, or quality, of mental departures, and penetrates into the sub-conscious and analyzes the character and personality of the individual at close range. Psychoanalysis has revealed the true nature of many formerly obscure and poorly understood examples of epilepsy. The clinical symptoms permit of a general classification of three main types of seizure, namely, motor, sensory, and psychic. The epileptic temperament is always unsocial and potentially criminal. Biologically he may be looked upon as a monstrosity in which the variations and defects of several generations of ancestors have combined to produce a strange and perverted type of individual.—Journal of Criminal Law and Criminology, IX-2, Aug. 1918. pp. 260-266. W. W. C.

HICKS, VINNIE C.. INTELLIGENCE TESTING AND TESTIMONY. A suggestion that intelligence tests may be useful in evaluating

testimony. Two sisters, age 13½ and 16 years, confessed to having been abused sexually by their father, since the mother's death. The matter was reported to the probation officer by their housekeeper. The father denied the charge absolutely, contending that the whole affair was "worked up" by the housekeeper because of a grudge she bore him. The girls' stories, however, coincided in every detail. Tests by the Stanford Revision of the Binet Scale showed an I. Q. of .75 in the case of each girl. Both were classified as borderline. This fact in itself was of "no use in solving the problem." Two striking facts developed, however. The tests showed (a) a decided inferiority in imagination; neither, in the examiner's opinion, could possibly have imagined such a story; (b) noticeable (abnormal) lack of memory. Neither could repeat 6 digits (X-year test) or repeat enough memories to pass X-year reading test. Neither could accurately describe simple occurrences. If the story were fabricated, it could not have been told by the girls with such close agreement in detail. On the recommendation of the psychologist, the girls' stories were accepted as truthful evidence, and the father sentenced to the penitentiary.—*Training School Bulletin*, XV-2, Apr. 1918. pp. 29-30. J. H. W.

HOWARD, GEORGE ELLIOTT: ALCOHOL AND CRIME: A STUDY IN SOCIAL CAUSATION. Alcohol and its use appears as a powerful antisocial force. It impairs the judgment, clouds the reason, and enfeebles the will, while at the same time it arouses the primitive instincts. In an investigation made of 13,402 convicts, to measure the relative influence of alcohol as a producer of felony it was found that 50 per cent were wholly or in part induced by intemperance as a general cause, and in 16.87 per cent it was the sole cause. The largest percentage of alcoholic criminals is yielded by the "occasional drinkers," the next largest by the "social drinkers," while at the bottom are the "excessive drinkers." There are even darker phases of alcoholic criminality. During the year of 1913 the court of domestic relations in Chicago heard 3,699 cases of which 2,432 were for wife or child abandonment. Among the causes excessive use of liquor held first place with 46 per cent. Alcohol is a menace to mother-welfare and child-life. "The child of the female drunkard is not born with a direct alcoholic tendency, but is probably born ill-nourished and with a badly developed brain and nervous system, which make him more likely to fall under the influence of drink." Directly or indirectly alcohol is a potent factor in the waste of human life. It is a cause of suicide and of race suicide. It is estimated that there are 106 diseases in which alcohol may be one cause of death. Without doubt the saloon is the chief laboratory of vice and crime. The closing of the saloon is the indispensable condition of any successful effort to eliminate the evils caused by alcohol.—*American Journal of Sociology*, XXIV-1, July, 1918. pp. 61-80. M. S. C.

HUNTER, JOEL D.: INCREASE IN JUVENILE DELINQUENCY. Already the Chicago probation office is beginning to feel the effects of war in the increase of juvenile crime. The State School for Boys at St. Charles

is overcrowded. The number of small boys is especially great. In a letter Mr. Hunter gives the following data concerning the number of delinquents brought before the court in the same months for 1916 and 1917: April, 195, 232; May, 196, 303; June, 281, 326; July, 231, 289. Despite this increase in the number of court wards, the figures show that a relatively small number have been committed to institutions, apparently because of the over-crowded conditions. "The purpose of this letter is to state to you the serious situation which is before the court because of the increase in juvenile delinquency. Because of the general restlessness and excitement in the community due to the war, I believe that this increase is going to continue. My reason for this belief is based on the reports which I have received from the other belligerent countries." One of the steps suggested is the increase of the efficiency of institution parole departments.—*Institution Quarterly*, VIII-4, Dec. 31, 1917. pp. 73-74. J. H. W.

LINDSAY, JOHN D.: SAFEGUARDING THE CHILDREN OF THE STAGE. The first law, statutory or otherwise, in England or America governing or regulating the employment of stage children was enacted in New York in 1886. Many children were trained from childhood to perform in the circus ring and to sing and dance on the stage, and "few stopped to consider that the only ones who profited by these and other kindred forms of child slavery were heartless employers and worthless parents." Since 1886 it has been a misdemeanor in New York state to employ children under sixteen in the circus ring, and in 1892 this prohibition was extended to public singing and dancing. This law has been carefully enforced, and the modern juvenile actor, to be permitted to perform in this state, must be a normal child; its material welfare is not to be sacrificed to the pecuniary greed of its parents. With the development of the film drama came the use of children in thrilling and spectacular pictures. In 1916, an amendment to the previous law provided that, as in the case of stage children, no child under sixteen may be employed in connection with the making of a motion picture film without consent of the proper local authorities. This amendment has done much to improve conditions in this state, but most motion-picture films are manufactured in the far west. The purpose of the law is to prevent the abuse of children, rather than punish the manufacturer after nerves have been shattered and eyesight ruined.—*National Humane Review*, VI-8, Aug. 1918. pp. 146-158. W. W. C.

LOCKE, E. M.: A STUDY OF FEEBLE-MINDED IMMIGRANT MOTHERS. Of 93 cases of feeble-minded mothers registered by the Massachusetts society for helping destitute mothers and infants, approximately 39 per cent, or 36, were immigrant girls. Of these, 32 came from Great Britain, 1 each from Italy, Poland, Norway, Sweden. Their ages ranged from 18 to 38 years, 25 out of 36 being between 21 and 25 years of age. The number of years spent in the United States before receiving help averaged 5. Thirty-five of these mothers were morons, 1 an imbecile. Only 8 were in state cus-

tody, and of the other 28, 4 have been legally deported, 4 sent home by the state, 3 are in temporary public custody, 3 in temporary private custody, 1 is dead, and 11 are at large (6 married and 5 in schools for feeble-minded) one of whom is about to become a mother. These 36 women have had 50 illegitimate and 9 legitimate children, of whom 14 are dead, 12 are public charges, and the rest receiving private care in own homes or by relatives. Of 39 living children the mentality of 26 was impossible to determine; 5 are apparently normal, and 8 subnormal. This great problem, involving disease and crime (in one instance infanticide) has been dealt with by 22 agencies. A mental examination given each girl upon entry would have prevented this burden and expense falling upon the state.—*Training School Bulletin*, XIV-9, Jan. 1918. pp. 145-146. C. E. W.

OSCHNER, EDWARD H.: SOME EUGENIC PROBLEMS THAT DEMAND SOLUTION. Although self-preservation is generally conceded to be the first law of nature, the second law is surely propagation of species. Little or no progress has been made in sex morality since the beginning of written human history. Until a serious attempt is made to correlate the many sporadic attempts to overcome sex-immorality and all its attended evils, and to solve the underlying greater problem of normal sex life and sex physiology, there can be little hope of progress. A marked improvement will be obtained only by placing the whole problem of sex physiology on a secure scientific basis. Biology has laid the foundation for the solution, but the problems of eugenics will never be solved on the basis of laws of heredity because in man many new factors are operative, for example, the inhibiting effects of conscience, and the imperative necessity of permitting relatively free choice in the selection of mates. The unselfish cooperation of the best in every group will be required to solve these difficult problems. A few questions which must be studied and satisfactorily answered on the basis of scientific investigation are: Is prostitution or polygamy ever justifiable? Is illegitimacy or abortion ever permissible? Is the requirement of a health certificate for marriage desirable? Will over-population be prevented by epidemics, famines and recurrent wars, or by abortion and prevention of conception, or by voluntary and involuntary celibacy? Are we willing to continue, as in the past, with war, famine, pestilence, abortion, prostitution, and venereal disease, or are we ready to seek and find a better way? All human problems are possible of solution, provided the right people can be found to do the work and the problems are approached with the right spirit and determination.—*Illinois Medical Journal*, XXXIII-6, June, 1918. pp. 301-306. W. W. C.

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States, 1912 to 1917. Helen S. Trounstone Foundation Studies, Vol. I, No. 2, Cincinnati, O. May 15, 1918. pp. 59.

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A SUMMARY OF FINDINGS IN A STUDY OF SEXUALISM AMONG A GROUP OF ONE HUNDRED DELINQUENT BOYS

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I. INTRODUCTION.

While making medical examination of delinquent boys in juvenile court service during former years the writer repeatedly noted neurotic symptomatology and mental states of sex etiology which were in excess of the number of similar conditions in the general child population. At that time it did not occur to me that these neuroses or symptoms-complex were indicative of anything more important than somatic enervation and hyperirritability resultant of bad hygiene and concomitant with other traits acquired by practically all delinquent boys in the course of their irregular living. I was fully aware of the significance of sexuality as a motivating factor in misconduct of girls because of the symptomatology their social histories usually present as regards both individual conduct and their less common group behavior. Boys on the other hand usually present in the foreground of their conduct such traits as dishonesty, truancy, nomadism and disorderliness which generally have no obvious sex association and my attention therefore was not directed beyond these expressions of moral deviation in any systematic consideration of sex motivation.

The persistent recurrence of such psychophysical observations and indications of erotism in the personal histories of so many boy misdemeanants, however, strongly suggested the genetic importance of abnormal sex functioning in relation to diverse misconduct and led to the making of a few exploratory inquiries among delinquent boys whose known conduct was without any trace of sexualism.

With surprising response when favorably encouraged to discuss

their personal histories these subjects revealed extensive sex consciousness and an involvement frequently exceeding that of known sex offenders. My former conception thus was modified and under the stimuli of the important facts elicited by these sporadic inquiries, which proved to be of important therapeutic value to the boys under analysis, I undertook the present intensive group study for the consideration of erotic motivation in the irregular behavior of boyhood.

The study was extended with frank deliberation among an unselected group of one hundred boys whose misconduct was known to be confirmed and as diffused in character as is observed in the usual juvenile court practice. Selection of material was made only in one respect, namely, that boys were chosen to whom we had access for the deliberate use of analytical technique. In no case was the study frustrated by a blocking of approach—a salutary fact attributable, I would say, to the native frankness of children when sympathetically freed of the reticence engendered by the attitude of society, and to the fact that, with a few exceptions, the consultations were altogether personal and purposely kept unthwarted by avoiding parental collaboration. The importance of the latter factor is made obvious by the fact that none of the subjects of the study had ever conversed with their parents regarding matters of this sort and all were disinclined so to do. Though the confidence reposed in the analyst was respected in all cases where our acquaintance with the parental relationships showed that no benefit would accrue to the child from a discussion of the topic with his parents, we did apply our findings helpfully in quite a few instances when the parents were responsive and the boys favored the communication.

A period of nearly two years elapsed during the study of this group. Considerable variation occurred in the length of time consumed by the several analyses. Some histories were assembled bit by bit during periods of association extending over a year. In a few cases an hour or two of direct inquiry sufficed, though such minimum periods were always preceded by a considerable interval of companionable association. Probably these periods of friendly approach contributed more to the success of the studies than did ingenuity of method in eliciting an unrestrained, honest recital of facts.

In each instance the subject's reactions were apparently salutary; and while no general consideration of therapeutic results is included

in this paper, it may be noted that a gratifying improvement occurred in the physical and mental condition of many of the group who have continued under observation.

Diagnostically the findings have proven to be unusually illuminating as regards the causation of delinquency, particularly in states of inertia, manifesting in nomadism, vagrancy, truancy; and in conflicts, yielding irritability, untruthfulness and dishonesty. The findings strongly support the postulate that sexuality is the most productive source of irregular behavior in childhood.

II. RANGE OF SEXUAL SYMPTOMATOLOGY RECORDED.

For the purpose of this study the term sexualism may be defined as an habitual, pathological functioning of the sexual mechanism. The data used have been limited to such clearly defined symptomatology, and the study throughout has not been concerned with the normal interest in sex which is an ubiquitous trait in childhood; nor with occasional orgasms induced experimentally without erotism.

Among the one hundred boys who furnished the material for the study, seventy-one presented symptomatology of an erotic nature and an addiction of interest and practice within the meaning of our definition. The twenty-nine others who were recorded negative possessed normal sex interests and fourteen were familiar with libidinous sensations, but had not frequently induced them. Their sporadic acts were not regarded to be pathological for they involved no addiction of interest. The sex group of seventy-one per cent to whom exclusive reference is made hereafter, all were habitual autoerotists, with a frequency of orgasms ranging from three times a week to five times daily. All attributed their continuity of practice to sensory interest, which usually was reported to be cumulative from the time of incidence which, in every case, was at least a year prior to the date of the analysis. Although very few of the subjects could recite dates accurately they usually traced an uninterrupted period of indulgence and a confirmed interest two or more years back. Only four recalled that their interests originated with themselves; while sixty-seven had memories of association with playmates which they considered was the source of their practice.

With no exception a nocturnal hour before sleep was the preferred period. Several cited the fact that their habituation to the suporific effect of the orgasms prevented them from sleeping until

they masturbated, even when they experienced physiological resistance to the act. Day-time indulgence was frequently noted, but appeared to be without regularity and was dependent upon the varying circumstances of their play hours. The usual practice was limited to nocturnal acts. Six subjects of prepuberal age and one who was pubescent purposely tore openings through their trousers pockets to facilitate orgasms at their desks during school hours and elsewhere. These seven recorded several acts daily, sometimes as many as five, though that frequency was attained only during periods of exacerbation which lasted a few days at the longest.

No data were secured that suggested periodicity. The natural inhibitory reaction in the nature of enervation for a few days following a succession of orgasms and visual stimuli which they found among girl playmates and in their other social relations, were opposing factors noted in some of their statements which sustained important relations to the periods of exacerbation and quiescence.

A second widely diffused practice revealed by the study, and an observation more portentous than the high incidence of masturbation, is that thirty-one subjects, or twenty-three per cent of the entire sex group, presented a history of fallatio relations which produced sequelae in the nature of persistent phantasia. Among these subjects autoerotism was of nightly occurrence and practically all of them cited, with but little variation, the habitual recurrence of the imagery associated with one or another fallationous relation, the memory of which they held agreeably dominant. Among three of these subjects we also observed substitution phenomena. In each case a male older than the child was surreptitiously made the object of libidinous interest and his personality and form visualized in a phantasy-substitute for the original consort, prodromal to the orgasm.

The fallationous relations, excepting three cases where the subjects were seduced by men, occurred exclusively with boy companions. All were initiated during prepuberal age. Approximately sixty per cent of them were seduced by pubescent boys and the others consorted by mutual approach with prepubescents. Four of the seduced group stated that they were coerced by pubescents when they were about six years old or younger. The others expressed no memory of having offered resistance. The usual statements indicated that there was more or less mutual interest in the acts which generally

occurred in their play associations. In most cases other erotic acts and conversation led the novices to participate somewhat in the nature of an adventure. All but the four who were coerced during infancy recalled having masturbated prior to their fallatio relationship. The entire number subsequently made use of their memories as erotic stimuli. A fact of social significance was shown in the histories of five twelve to fourteen-year-old boys of the fallatio group who, after a year and more of association with playmates, voluntarily frequented low-grade amusement resorts and the water front to solicit men with whom they consorted for financial considerations.

Only in a few cases was a preponderant interest in heterosexual relations noted. This may be explained by the fact that fifty-seven of the seventy-one members of the sex group were of prepuberal age at the time of our inquiry. Three of prepuberal age and four pubescent subjects gave a history of coitus. It is gratifying to note that subjects who were physiologically at puberal imminence or beyond had, in addition to their interest in homosexual acts, normal amative desires and probably were limited in their heterosexual relations only by their environment. Likewise all of the homosexual behavior recorded was found to be directly due to environmental influences.

III. RELATION OF SEXUALISM TO THE MISBEHAVIOR WHICH BROUGHT SUBJECTS INTO COURT.

In designating the nature of the child's behavior which occasions court action one is apt to fall into the error of using a rule of thumb classification which seldom is accurate. A specific act, for example, stealing, may lead to an arrest though that offense may be only collateral to a course of unstable behavior including such varied symptoms as indolence, insubordination at home or in school, truancy and so on.

The significance of this fact is revealed in our present findings which show in nearly every case a wide range of unfavorable interest and behavior that is technically within the usual legal definition of delinquency but unknown to society. For the purpose of tracing the relation of sexualism to the immediate misbehavior which brought our subjects to the attention of the authorities we shall make use of such a tabular grouping of their conduct according to police and court data.

The seventy-one subjects were technically involved in this regard as follows:

Nomadism, loitering and indolence	28
Dishonesty	18
Truancy	9
Vulgarity on school grounds	6
Sexual misconduct	6
Disorderliness about community	2
Irritability of temper and disobedience at home	2

The court's sociological information as assembled from family, school and police sources regarding these delinquencies contain traces of sexualism in only twelve cases, which are referred to above under the heads "Sexual misconduct" and "Vulgarity on school grounds." The six charged with vulgarity about the school premises were brought in together. They were ten and eleven years of age and constituted a community group that had collectively engaged in erotic acts on numerous occasions and conversed offensively with other children regarding their adventures. Our findings show that three of the group had a neurotic inheritance and masturbated as early during infancy as they could recall. A year or longer prior to the court hearing these three had initiated the other three members of the group. They referred to themselves as "The Dirty Six." Their conduct was characteristically gregarious although they individually sought for erotic adventure among other children, including girls, and directly endeavored to relate each new companion to their group. Five of them were a year and more retarded in mental development; two being influenced only by hygienic faults and three by congenital factors. The analyses were followed by consultations with the parents and the group conduct was corrected. The three with normal mental endowment responded individually but the other three who were high-grade morons have continued erotic in their behavior. Nine months following the initial court care of this case one of the morons informed the analyst that he recently had stolen money amounting to \$10.00 and shared it with another member of the original group. Previously he was not dishonest. At this recent interview he stated that he continues to induce nocturnal orgasms with phantasia related to his former group experiences.

The six subjects who were brought to the court because of "sexual misconduct" were apprehended separately and were without any community of interest as in the case of those charged with "vulgarity."

One was a boy of fourteen years who had experimentally attempted coitus with a 7-year-old girl whom he enticed into his home during the absence of his mother. He was a well-bred, attractive child and presented a history of autoerotic interests following a chance experience with an older boy at the age of twelve. He had secured no physiological information from any source and attributed his act with the girl to curiosity. Another was an Italian of seventeen years who made salacious use of a 5-year-old girl whom a neighbor had left in his care while other members of the two families attended a funeral. He previously had numerous fallatio relations with boy companions and had masturbated daily, with occasional omissions of two or three days, since his eighth year.

Of the other four, two were complained against because of masturbation with younger boys and two were taken by the police for fallationous association with men. The latter had personally sought the adult companionship and their selection of consorts older than themselves was a choice based upon other experiences they had had with both boys and men.

Directing our attention now to other misdemeanors involving the remaining fifty-nine boys, which were without perceptible sexual involvement, it is apparent that we were largely dependent upon analytical technique and the evaluation of our data was made with due regard for the mental and somatic symptomatology, and the opinions of the subjects themselves regarding the importance of the influence exerted by their erotic interests and behavior upon their acts and general character.

With striking similarity erotic interests dominated the behavior of all members of the "nomadic, loitering and indolent" group of twenty-eight subjects. Neurological and other physical findings strongly indicated hygienic faults in most cases. Sexualism with only a moderately varied manifestation seemed to permeate their consciousness and was made more manifest during the analyses doubtless because of the paucity of other interests. All of these subjects were autoerotists of long standing and a majority of their histories record fallatio complications. Several were of inferior constitution but the improvement under hygienic control, whenever favorable treatment was secured, was so marked that sexualism was plainly shown to be an important factor. No member of the group was a confirmed vag-

rant though all had been either habitually insubordinate to school and vocational discipline, had persistently loitered in the least desirable social environment, or now and then had been away on stolen rides to other towns. The content of their experiences abounded in homosexualism with older boys and homeless men. Several subjects who came from apparently stable family environment and had repeatedly run away from their homes without any known reason, were found in each instance to have a background of erotism which was the motivating influence and during our analyses was readily perceived, if not voluntarily suggested (as was in fact done in three cases) by the boys themselves. Similar causation was detected in each of these indolent and unstable subjects and the entire group thus in one form or another revealed the fact that sexualism was concomitant with their behavior as reported to the court and was a source of intellectual, moral and physical enervation.

In a general respect the boys who were charged with "dishonesty" presented less somatic depletion and more complex mental symptomatology. There were fewer neurotic symptoms noted by inspection than among those vagrantly inclined. Conflicts were found among them to be a more noticeable factor in the weakening of moral inhibitions and the causal relations were therefore less easily isolated. But when stealing was found to be directly due to pathological sex behavior, as was the case in nine instances, the complex symptoms unfolded with such unmistakable clearness that this group constituted the most interesting part of the study.

Although sex interests were found to be genetically associated with the stealing in eleven cases, in only one instance was the sexualism plainly in the foreground, although even here the influence was not observed prior to the analysis. This subject was charged with stealing an automobile. We found that he took the car for the immediate purpose of conveying a girl into the country for illicit association. At the hearing this fact was successfully suppressed and the evidence submitted to the Court by the police was misleading in over emphasizing his dishonesty as a controlling trait.

The genetic relationships in other cases were not so easily perceived. One subject of fourteen years traced a course back through five cleverly-planned thefts to an inceptive act of stealing from the hotel room of a man directly after they had mutually induced

orgasms. Notwithstanding the fact that the subject stated he encouraged the sedulous interest of the man during more than an hour with erotic desire, he impulsively purloined his gold watch and did not fully comprehend the nature of the theft until he was on the way home. He had never theretofore, so far as he recalled, stolen anything. He expressed no consciousness of guilt nor dislike of the man during the analysis though he recalled some feeling of disgust at the close of his orgasm which the man had coercively prolonged. The second and subsequent thefts followed during immediate weeks and were without any similar sexual involvement. Another subject of thirteen years was associated in burglarous stealing with a seventeen-year-old boy. During some weeks prior to their robbery he had gained an unfavorable reputation both at school and in his neighborhood because of disorderliness. He had a pleasing personality free from any sort of innate dishonesty and was affable to the degree of pliancy. This social trait had in fact led to companionship with the older boy which soon developed an erotic complex and culminated in his community behavior. This case was similar to the experience of an eleven-year-old member of the dishonest group. He was arrested for stealing from dressing rooms in a natatorium, access to which he had gained by crawling under the slightly elevated partitions. Prior to the analysis he staunchly affirmed his individual responsibility for the stealing and accounted fictitiously for nearly \$50.00 in cash taken. We found him to be an honestly disposed, affectionate child who had been socially controlled for two years by a boy of sixteen through mutual sexualism. The stealing which occasioned his arrest and his subsequent falsification were directly traceable to the influence wielded by the companion through the sex complex.

Two other "dishonest" subjects were found to be dominated by complexes of long standing which were of exceptional interest.

One was a winsome, healthy child somewhat mature in manner for his eleven years when brought in by a constable and his solicitous mother. He had stolen a considerable sum of money from a neighbor's home. An uninterrupted line of dishonesty was traced by the mother back to his fifth year. She expressed very little confidence in his future because of the persistency of the trait in spite of various methods of training she had used under the direction of several educators and a clinical psychologist whom she had consulted in another

state. The psychologist had limited his diagnostic methods to the application of intelligence tests. Our analysis led directly away from the field of previous investigations and revealed a series of coerced fallationous adventures with a group of pubescent boys when he was five years old, and concurrent stealing of money and eggs from his home for them under threats of torture if he should not comply with their sensuous and dishonest demands, or if he should ever tell of their relations. He was rather mature for his age and, yielding to a natural emulative impulse, he readily was habituated to the behavior and made a willing consort of the group. Soon thereafter their relations produced libidinous nocturnal imagery and he became a confirmed autoerotist and petty thief. Six months have elapsed since the child was brought in and his condition now is practically satisfactory.

The other case involved a boy of sixteen who was arrested for stealing an automobile. His father sought our professional assistance and stated that the present theft was a culmination of a period of moral apathy and indifference toward the family on the part of the boy which began at his eighth year. At that age his natural confiding and affectionate disposition underwent a sudden change. He became stolid and retiring in manner, and seemingly lost all emotional interest in the other members of the household. In the midst of an otherwise companionable family his unresponsiveness was a source of grave concern to the parents. His known community relations and high school standing were satisfactory. From the outset of the analysis the boy proved to be eager for help. He said he wished to be understood, but never before had a favorable opportunity. At the age of eight he was intimidated by a group of older boys and held under their control in almost daily association for several months. The experience disordered his emotional life and resulted in a complete suppression of confidence between himself and other members of the family. Following the initial group experience his family moved to another community. He was twelve years old at this time and so influenced by erotic interests that he sought out companions in the new community and thereafter until the present maintained individual companionships with boys of equal age whom he found to be homosexually inclined. Finally one afternoon while in an erotic mood he took the automobile for the purpose of gaining

the company of a boy chum for a ride into the country. Although the theft was premeditated and committed with an understanding of its seriousness his only object was the gratification of an erotic desire. His mental attitude toward the family changed promptly following the analysis and a normal situation has prevailed now for nine months.

IV. PHYSICAL FINDINGS.

The physical examinations were limited to general inspection, sensory, cardiac, coordination and motor control tests. Very little of unusual importance was observed. A syndrome of nerve signs, anaemia, undernourishment and early fatigueing was common to the group and amounted to a somatic type. Fully one-half of the group were functionally neurotic in this composite respect. The nutritional findings are not well indicated in the height and weight norms because several of the age groups are so small that one or more over-size subjects invalidated the average. Their cardiac rate averaged an increase of 38 per cent following a stationary run of one hundred steps.

TABLE I. HEIGHT AND WEIGHT NORMS.

Age period	No. of boys	Mean height, in.	Mean weight, lbs.
8-9	3	50	56
9-10	5	52.67	66.20
10-11	6	55.5	72.5
11-12	12	55.33	72.67
12-13	15	57.2	80.33
13-14	16	59.13	85.75
14-15	5	61.	91.2
15-16	5	63	106
16-17	3	63	117.5
17-18	1	65	128

TABLE II. AGES OF SEX GROUP.

Years	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	Total
Number	3	5	6	12	15	16	5	5	3	1	71

Several hygienic factors combined in producing the physical depletion. Night hours, cigarettes and inadequate feeding contributed in important measure, though probably in lesser degree than the sex element. The effect of pathological emotion, such as anxiety which was concurrent with their erotic practices, upon nutrition and nerve stability has much significance in this regard.

Hypertonia of the genitalia was frequently observed following

TABLE III. INTELLIGENCE RATINGS OF THE SEX GROUP.

	Mental age											
	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII
Chronological age												
8	-	-	2	1	-	-	-	-	-	-	-	-
9	-	-	3	2	-	-	-	-	-	-	-	-
10	1	-	1	1	3	-	-	-	-	-	-	-
11	-	-	-	1	4	6	1	-	-	-	-	-
12	-	-	-	1	3	1	9	1	-	-	-	-
13	-	-	-	1	2	1	5	6	-	-	-	-
14	-	-	-	-	-	1	2	-	2	-	-	-
15	-	-	-	-	1	-	-	1	2	1	-	-
16	-	-	-	-	-	1	-	-	1	-	1	-
17	-	-	-	-	-	-	-	-	-	-	-	1

TABLE IV. INTELLIGENCE RATINGS OF THE NON-SEX GROUP.

	Mental age										
	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII
Chronological age											
8	1	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-
10	-	-	1	5	-	1	-	-	-	-	-
11	-	1	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	2	-	-	-	-	-
13	1	-	-	1	-	1	3	-	-	-	-
14	-	1	-	1	-	1	-	3	-	-	-
15	-	-	-	-	-	1	-	-	1	-	-
16	-	-	-	-	-	-	-	1	-	1	-
17	-	-	-	-	1	-	1	-	-	-	-

slight consensual stimulus, such as local inspection without contact, or upon the recital of erotic symptoms.

Gonorrheal infection was present in only one subject. There was no lues observed, though blood tests were not made.

V. INTELLIGENCE FINDINGS.

An intelligence rating on the basis of the Stanford Revision of the Binet scale placed 11 per cent of the sex group three or more years below their chronological age level and the significant number of 36 per cent one or two years retarded.

In contrast with the above the non-sex group shows 27 per cent retarded three or more years and 17 per cent one or two years below grade.

The chief value of these findings is in their indication that erotism profoundly effects the intellectual processes. There is no support in the data for a reliable opinion as to the amount of potential congenital feeble-mindedness there may be among the 36 per cent who were one and two years backward, but the intimate observations we made during the period of the study and subsequently have assured the writer that a very large part of the one and two year retardation is attributable to faulty hygiene.

The subjects were noticeably inclined to lag along in their intellectual development with only such a maximum of effort as their environment demanded. This apathetic state of mind kept them below the level of alertness and agreeably favored their indolence. Such inertia, being physiological in character, is as little amenable to compulsion as though the disinclination to vigorous mental action were due to amentia. But when these subjects were made aware of their condition and realized the depressing effect of their erotic interests they readily comprehended the relationship and easily increased their mental effort.

A SURVEY OF THE MENTALITY OF 87 JUVENILE DEPENDENTS.

HERBERT POPENOE.

Washington, D. C.

Upon invitation of Dr. C. W. Skinner, Superintendent of the Industrial Home School of Washington, D. C., individual tests were made by the writer of 87 of the inmates of the school. No organized psychological examination of the institution had heretofore been made, and the lack of knowledge regarding the mentality of the inmates rendered their wise and expedient care difficult. It was in order to bring about a more definite knowledge of the mental status of the school that the survey was instituted.

The 87 cases tested, comprising 48 boys and 39 girls are representative of the institution, for while not including all the material available, the cases were unselected as to supposed mentality, behavior, or cause of commitment. Such cases as were not tested included primarily those who entered the institution after the study was commenced.

The Stanford Revision of the Binet scale was used for determining the mental age of each case, and the results thus secured were compared with such information as to the previous life and cause of commitment of the case as was already to be found in the records of the school. Since the results aimed at were mainly general, no intensive study of the cases was attempted.

Although some instances were noted in which the children appeared ill at ease, the majority seemed pleased with the idea of the tests. It is improbable that the results in any case were markedly influenced either by sullenness or hysteria. Some had been examined previously by means of similar tests, but were unable to bring to mind anything but a faint recollection of what they had done before. The institution is housed on the dormitory plan, and it was hence impossible to keep the children from communicating with one another regarding the tests, but from careful observation it was apparent that they were unable to convey more than a vague description of the tests, and certainly not enough to influence the results.

TABLE I. DISTRIBUTION OF INTELLIGENCE QUOTIENTS IN RELATION TO CHRONOLOGICAL AGES.

I. Q.	7	8	9	10	11	12	13	14	15	16	To.
1.15-1.19	1	1	1	....	....	....	....	3
1.10-1.14	1	1	1	....	....	....	....	....	3
1.05-1.09	1	....	2	1	....	1	....	1	....	6
1.00-1.04	1	1
.95-.99	1	....	1	....	1	1	1	1	6
.90-.94	1	....	....	1	3	2	....	....	....	7
.85-.89	1	2	3	....	1	....	....	7
.80-.84	1	1	....	....	3	1	1	1	1	2	11
.75-.79	1	....	....	1	1	3	1	3	1	11
.70-.74	1	....	1	....	1	1	4	....	....	8
.65-.69	4	1	3	2	2	1	13
.60-.64	1	1	....	1	....	3	2	8
.55-.59	1	....	....	....	....	0
.50-.54	1	1	1*	....	....	....	3
Total	1	5	2	7	17	12	14	10	11	8	87

*This girl actually rated at I. Q. .48.

Dependents or delinquents are taken into the school at any age above infancy and are paroled, when possible, before attaining an age greater than sixteen years. The cases tested ranged in age from seven to seventeen years. Those of seventeen years are considered with the sixteen year old group for comparison with intelligence quotients and mental ages. A possible slight though unavoidable error is met in calculating the chronological ages, since in some cases, especially those where illegitimacy is a factor, conflicting statements were made regarding the date of birth. In these instances, it was necessary to rely upon the judgment of the superintendent. The distribution of the intelligence quotients in relation to chronological ages is shown in Table I.

The median for intelligence quotients is found in the .65-.69 group, that for chronological ages at eleven years. For boys alone, the median for intelligence quotients was .75-79; for girls alone, .65-.69. But three cases were found where the intelligence quotient was below .60, since an attempt is made to prevent the definitely feeble-minded from entering the institution. One girl graded .48 while two boys graded between .50-.54. These three cases gave every evidence of being definitely feeble-minded, and are probably low class morons.

Considering for statistical purposes, those below I. Q. .75 as being probably feeble-minded, 29.1 per cent of the boys, 46.1 per cent

of the girls, or a total of 36.9 per cent fall below this mark. 52.0 per cent of the boys, 43.5 per cent of the girls, or 48.2 per cent in all graded between I. Q. .75 and .99 and can thus be considered as simply retarded. 18.7 per cent of the boys, 12.5 per cent of the girls, or 15.6 per cent in all graded above I. Q. 100 and can thus be considered as above the norm. Due to the policy of the school in refusing to admit the visibly feeble-minded, and in paroling the inmates as they show capacity for self control, cases below I. Q. .60 or above I. Q. 1.10 are kept almost entirely weeded out.

In order to check the findings as expressed by the distribution of intelligence quotients, the mental ages and corresponding school grades of the cases were compared with the expected school grades, with the correlation shown in Table II.

TABLE II. DISTRIBUTION OF MENTAL AGES IN RELATION TO SCHOOL GRADE.

	5	6	7	8	9	10	11	12	13	14	15	16	To.
I	1	3	1	---	1	---	1	---	---	---	---	---	7
II	1	1	3	1	---	---	---	---	---	---	---	---	6
III	---	2	3	---	2	1	1	---	---	---	---	---	9
IV	---	---	---	3	9	6	1	1	---	---	---	---	20
V	---	---	---	1	2	7	6	2	---	---	---	---	18
VI	---	---	---	---	2	2	2	5	1	1	---	---	13
VII	---	---	---	---	---	---	2	2	1	---	---	---	5
VIII	---	---	---	---	---	1	2	---	1	1	3	1	9
Total	2	6	7	5	16	17	15	10	3	2	3	1	87

As is evident, the correlation is very close. In the lowest grades, due to the fact that many of the pupils are chronologically old for their grade, the average grade is slightly higher than the corresponding mental ages would warrant; the actual and expected grades are almost identical throughout the middle years, while in the higher studies, the actual grade is slightly lower than expected. The correlation is so close, however, and such deviations as occur are so regular and explainable, that it substantiates satisfactorily the results already reached.

Data on causes of commitment were supplied the writer by Dr. Skinner. The cases are in the main committed for some general cause rather than for some specific offense or reason, more than three-fourths being committed because of the destitution of their parents or guardians, who were hence unable to care for them adequately

enough to keep them out of trouble. Dr. Skinner's statement is shown in Table III.

TABLE III. CAUSES OF COMMITMENT.

	Boys	Girls	Total
Destitution	34	35	69
Stealing	1	---	1
Truancy	2	---	2
Discharging explosives	1	---	1
Violation of probation	8	2	10
Incorrigibility	2	2	4
Total	48	39	87

SUMMARY.

1. A total of 87 cases, comprising 48 boys and 39 girls, were tested by the writer, using the Stanford Revision of the Binet scale, at the Industrial Home School, Washington, D. C.

2. The cases are typically representative. Practically no trouble was encountered in getting the cases at their best.

3. The chronological ages varied from 7 to 17 years, the mental ages from 5 to 16 years.

4. About one-third of the cases are so retarded as to be considered probably feeble-minded. No definite cases of imbecility were found.

5. A comparison of mental ages and school grades gives a close correlation.

6. Three-fourths of the cases were committed because of destitution.

A CHART FOR THE DETERMINATION OF I. Q. VALUES.

HERBERT A. TOOPS AND RUDOLF PINTNER

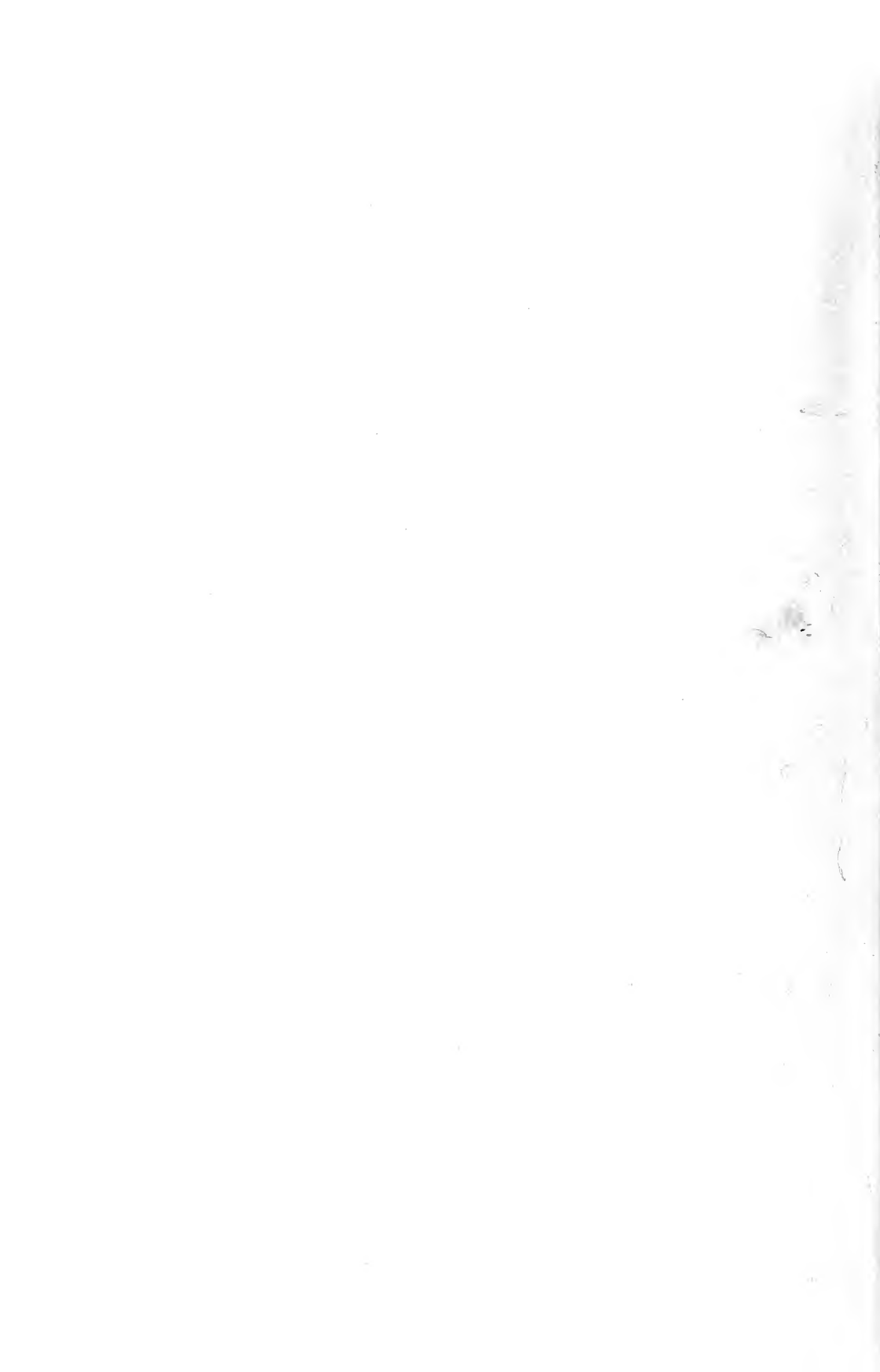
Ohio State University

The accompanying chart has been used to great advantage in our Psychological Clinic. Although the actual computation of the Intelligence Quotient is very simple it nevertheless takes some time, and the writers have found the use of the chart for a rapid approximation of the I. Q. extremely useful. This is particularly true where a large number of tests have been given and the I. Q.'s remain to be calculated. It is also valuable in checking the I. Q.'s of students or other workers.

It is constructed for use with the Terman scale. The base line shows the Mental Age and each age is further subdivided into sections showing every two months. The vertical lines show the Intelligence Quotient, reading to units. The diagonal lines across the chart show the chronological ages. These run from age 3 to age 16, which is the highest or adult age on the Terman scale. The age lines are supplemented by finer lines showing half ages, so that a still more accurate I. Q. may be calculated if desired.

The first result of a Terman test is shown in years and months. For example, if a child with a chronological age of 9 years receives a mental age of 7 years and 4 months, we find the vertical line 7.4 at the top of the chart and run down till this line intersects the heavy diagonal line marked 9. Referring to the horizontal line intersecting this chronological age line, we note that the I. Q. is .81 or .82. If the child's chronological age were $9\frac{1}{2}$ years we could proceed further to the diagonal line between 9 and 10, and read off the I. Q. as .77.

The chart shows all I. Q.'s from 0 to 150.



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REVIEWS.

HAINES, Thomas H.: Report on the Condition of the Feeble-Minded in Kentucky to the State Commission on Provision for the Feeble-Minded. (Evidently published by the State Commission, in 1918, pp. 23.)

As scientific adviser to the Commission from the National Committee for Mental Hygiene, Dr. Haines investigated the problem of feeble-mindedness in the state of Kentucky by means of a census inquiry sent to physicians and teachers throughout the state and by means of inspections of institutions and of the conditions surrounding the "idiots" boarded out in the four counties under the Pauper Idiot Act, and by means of personal examinations of selected cases referred as suspected mental defectives from a number of institutions.

In 1916 the state expended \$165,000 for the support of 2,200 guardians. This form of state support is condemned as wasteful and legally certified pauper idiots in the homes of parents, relatives or inefficient. Some of the "idiot paupers" were not indigent; others were not feeble-minded; few had received proper educational training; some had married or had become the parents of illegitimate children; a part of the appropriation disappeared in official graft and the discounting of claims. The same appropriation of money would maintain a larger number in state colonies amid better social safeguards and better opportunities for training and productive employment.

Of 59 suspected mental defectives examined from the Kentucky Children's Home Society, 31 were classed as feeble-minded, or one-fifth of the enrollment. Twenty-four of the 338 inmates in the state school for the deaf were considered unquestionably feeble-minded, or 7.1 per cent. Of 38 children examined in the state school for the blind, 8 were classed as feeble-minded. Children remaining in the Kentucky Houses of Reform who had previously been classified as feeble-minded, were examined and reclassified, giving a return of 110 mental defectives or 23.7 per cent of the 463 enrolled. Of 115 combed out for individual examination from the Louisville Industrial School, 39 were clearly feeble-minded, or 9.3 per cent of the 418 enrolled. Of 62 children in a juvenile court who had been classed as feeble-minded, 42 were so classified. Of 422 inmates in the public poor farms of 15 counties and in privately owned farms of two counties, 106 were considered feeble-minded (20 being pauper idiots), 27 were mildly psychotic and 13 were epileptics. In the hospitals for the insane the superintendent considered 17 primarily feeble-minded and 318 epileptic.

Altogether the state now supports 3,052 feeble-minded and epileptics in institutions or at home under pensions, at an annual cost of \$321,000. This amount of money immediately available, would properly support a larger number in two colonies, but three colonies should ultimately be established. Commitment should be made only by order of court, certification as to feeble-mindedness should be made only by (two) physicians, and only a competent medical man should be appointed to the superintendencies of the colonies.

The author's careful, conservative estimate of the number of the feeble-minded contrasts with the extreme estimates frequently

made during the last few years, and is to be commended. We fail to see the justification of the recommended restriction of legal examinations of the feeble-minded and the occupancy of the superintendencies of the colonies to persons who are physicians. There are psychologists available who are fully competent both to diagnose feeble-mindedness and to administer a colony for the feeble-minded. The diagnosis, care and treatment of the vast majority of the feeble-minded are primarily psychological, educational and social questions. This claim holds notwithstanding the recent work in the field of endocrinology. Certainly we would say nothing to discourage this type of research. But while a few of the feeble-minded respond to glandular treatment, the vast majority do not, so far as facts now available show. During several years we have examined scores of mental defectives who have been fed on all the glandular extracts, singly or in combination, in the pharmacopeia. Almost all of these children are still in our special schools. They received no permanent benefit from organotherapy. It is important to examine the feeble-minded both physically and psychologically, but whatever the physical findings, the diagnosis of feeble-mindedness cannot be made apart from psychological and social findings. For over four years all the cases which we have examined have also been given a physical examination by physicians. I believe it can be said that possibly in 75 per cent of the cases, the psychological diagnosis would have been just the same had no physical examination been made; i. e., the physical data did not alter the diagnosis which had to be made from a consideration of the pedagogical, psychological and social findings. Nevertheless the physical examinations were well worth while for the information frequently obtained regarding the employment of physical measures which gave promise of improving the child's condition (and often actually did so).

J. E. W. WALLIN.

MacMurchy, Helen: *Third Annual Report of the Inspector of Auxiliary Classes of Ontario. Toronto, 1918, pp. 37.* There are now 35 special classes and schools in the province of Ontario, classified as follows: promotion classes, 2; parental or industrial schools, 4; open air schools, 2; open air classes, 2; hospital classes, 2; sanatorium classes, 4; institution schools, 15; training classes, 4. The Ontario Auxiliary Classes Act of 1914 authorizes the recognition of 14 types of classes:

1. Advancement classes; for children who are far above the average both physically and mentally.

2. Promotion classes; for children who are backward on account of some remediable cause, but are not mentally defective.

3. English classes; for children or adults of recently immigrated non-English speaking families who need special instruction in English for a short time.

4. Disciplinary classes and parental schools; for those children whose conduct, home conditions, or environment render instruction in such classes necessary.

5. Open air schools and classes; for delicate, anaemic or under-nourished children, held in forests, parks or fields, or in class-rooms one side of which at least is open to the sun and outer air.

6. Hospital classes; for patients in children's hospitals or wards or homes for incurable children.

7. Sanatorium classes; for tuberculous children or children in sanatoria.

8. Ambulance classes; for disabled children.

9. Speech classes; for children who suffer much from stammering, stuttering and other marked speech defects.

10. Myopia classes; for children whose sight prevents them from making satisfactory progress even when they are provided with proper glasses and placed in the front seat, or whose sight would be further impaired by using the ordinary text books and other means of instruction.

11. Lip-reading classes; for children whose hearing is so poor that even when placed in a front seat they cannot hear enough to make satisfactory progress, or who may require to learn lip-reading on account of the danger that they may become absolutely deaf.

12. Institution classes; that is, Public or Separate School classes for inmates of Children's Homes, Children's Shelters and Orphanages. There are many children in such institutions who would otherwise be eligible for admission to one or other of the above-mentioned Auxiliary Classes.

13. Special classes; for children suffering from Epilepsy.

14. Training classes; for children who are mentally defective, but who can be educated or trained, and whose mental age is not less than the legal school age.

The report summarizes what is being done elsewhere. Dr. MacMurchy's annual reports are always interesting and should prove stimulating to those for whom they are intended.

J. H. W.

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PERIODICAL LITERATURE

BERNSTEIN, CHARLES. SELF SUSTAINING FEEBLE-MINDED. Many feeble-minded and socially unfit are constantly requiring state care. At Rome, N. Y., a most noteworthy plan has been arranged. Nearby farms have been bought or rented and about 30 inmates placed on each farm. All the work is done by the boys under supervision. In this way food supplies for the entire Asylum have been acquired, and also housing room for the workers provided in the original farm house with a few alterations. A permanent colony of boys has been placed at Indian Lake to grow trees and do reforestation work. "A Working Girls' Home" has been established, where girls are available for domestic work, sewing, etc., by the day, week, or month. These girls are not markedly defectives, but are girls who have been unable to get along in the world because of abnormal conditions. They receive 50 cents a day, and return to the home at night where they are guided and shown how to spend their money. When it is shown they can rehabilitate or support themselves they are permitted to leave the home. As the percentage of borderline cases has increased while the idiot and imbecile class has decreased it has been found highly satisfactory to have de-

vised a method by which a greater number of the borderline cases may in time be returned to the world as useful citizens, doing a grade of work suited to their degree of mentality.—*Journal of Psycho-Asthenics*, XXII-3 and 4. March and June 1918. pp. 150-161. M. S. C.

FERNALD, WALTER E.: SOME OF THE LIMITATIONS OF THE PLAN FOR SEGREGATION OF THE FEEBLE-MINDED. Increased knowledge of feeble-mindedness during the past few years has emphasized the importance and heretofore unexpected extent of the problem. It is generally conceded that mental deficiency is the chief contributing factor in many of our social problems—especially crime, pauperism and prostitution. Individual segregation during the reproductive ages seems to be the most potent plan for reducing feeble-mindedness. Further scientific study will show methods of dealing with the problem without need of resorting to segregation. The problem is not as simple, however, as many of the "black" eugenical charts would indicate. It appears that we have not adequately interpreted the charts in which the disgenic trait occurs only occasionally. There is also a tendency to neglect the causes of feeble-mindedness other than that of heredity. Our conception of mental deficiency is no longer limited to the hopelessly incapable idiot and imbecile, but includes many of higher mentality who, under proper conditions, can become self-sustaining. Dr. Wallace aptly says: "It is not that many of the feeble-minded are not fit for the community, but that the community is not fit for the feeble-minded". The chief need is continued scientific study of the whole problem.—*Ungraded*, III-8, May, 1918. pp. 171-177. J. H. W.

FOSDICK, RAYMOND B.: PROSTITUTION AND THE WAR. Although 75 "red-light" districts have been closed since the beginning of the war, and there is not a segregated district within five miles of any large cantonment, military camp, or naval station, only the first line of defense has been broken. Beyond this is clandestine prostitution and then the automobile and the part it plays in the problem. The state, county, and city departments of health are rapidly assuming an important place in dealing with the situation because (a) prostitutes are the chief foci of venereal infection, (b) being a highly communicable, venereal disease presents a public health problem, and (c) health departments are the logical, recognized agencies for protecting the community as a whole from infectious disease. As venereal disease has been legally declared communicable and therefore reportable, health departments or some other suitable social agency must take up the problem of the proper care of prostitutes and others infected with venereal diseases. After being cured, the feeble-minded prostitute must be committed permanently to a suitable institution, the girl who would do differently if she "had a chance" must be given proper work and social surroundings, and the girl to whom silk stockings and a good time count for all must be placed under proper influences and conditions which will take the place of the casual dance hall.—*Social Hygiene Bulletin*, V-5, May, 1918. pp. 1, 2. W. W. C.

MERRILL, MAUDE A.: A NOTE ON THE DISTRIBUTION BY GRADES OF DEFECTIVE DELINQUENT WOMEN IN AN INSTITUTION FOR THE FEEBLE-MINDED. General observations have frequently led persons to the assumption that delinquency is most likely to occur in the highest (moron) grade of feeble-mindedness. A comparison of the groups in the population of the Minnesota State Institution for Feeble-minded shows the following frequency:

Female population	182 idiots	296 imbeciles	181 morons
No. delinquent	2 "	52 "	46 "
Per cent delinquent	1 "	17.5 "	25.4 "
No. females over 15 yrs.....	55 "	195 "	142 "
Per cent delinquent	3.6 "	26.6 "	32.3 "

The institution population is, of course, a highly selected group. The intelligence ratings are based upon the Kuhlmann Revision of the Binet-Simon scale. The frequency of delinquency is greater among the higher grades of feeble-minded in the institution. This is significant in view of the fact that most of the feeble-minded in reformatories and industrial schools are of the moron grade.—*Journal of Psycho-Asthenics*, XXII-3 and 4, Mar-June, 1918. pp. 175-177. J. H. W.

O'NEEL, J. E.: SIGNIFICANT RESULTS OF SURVEY. Refers to tests given in the public schools of Riddle, Oregon. Tests were uniformly made, the abbreviated form of the Stanford Revision of the Binet Scale being used. School progress and deviation were based on the average age of 7 for Grade I, 8 years for Grade II, etc., allowing six months on either side for normal. Supplementary data were furnished by teachers. These agreed well with the test results, especially in correlations of intelligence with school work. Boys seemed more backward than girls, 50 per cent of the former and 22 per cent of the latter being retarded from one to three years. Of 81 pupils tested, 34 "had sufficient mentality to warrant their being placed in grades from one to three years above their present position". Teachers' estimates accorded with this also. Eighteen pupils were found too backward mentally to do the work of the grade in which they were located at the time of the tests. Thus 52 of 81 pupils were improperly graded.—*Journal of Education*, LXXXVIII-7, Aug. 29, 1918. page 188. J. H. W.

STONE, ESTHER H.: A PLEA FOR EARLY COMMITMENT TO CORRECTIONAL INSTITUTIONS OF DELINQUENT CHILDREN, AND AN INDORSEMENT OF INDUSTRIAL AND VOCATIONAL TRAINING IN THESE INSTITUTIONS. The average age of girls committed to the State Training School for Girls, in Geneva, Ill., is sixteen years, which is far beyond the age when any institutions can hope to correct habits and ideas formed and existant for so long a period of time. Moreover most of these cases show defective mentality, constitutional inferiority with unstable emotional makeup, abnormal conduct, and extreme suggestibility. Many have infectious or contagious diseases and other physical defects at the time of commitment. Many declare their unwillingness to respond or do better. The only solution of the problem is to cull out

the defective from the rest of society at a very early age, remove him from the normal child, prohibit procreation by segregation, and give him the special training he requires. A trained psychologist should be provided for every school, and to make a careful study of every child who appears to be backward in his work, or evinces any mental peculiarity, or is criminally or immorally inclined. Then, if it appears that the handicap will develop into something serious, he should be transferred to a special school which will provide the training he needs.—*Institution Quarterly*, IX-1, Mar. 31, 1918. pp. 60-66. W. W. C.

USANG, LY, J.: AN ECONOMIC INTERPRETATION OF THE INCREASE OF BANDITS IN CHINA. In many sections of China bandits seem to be multiplying faster than the population itself. Current explanations are,—they are produced by flood and famine, the problem is political, or it is biological. However, none of these theories will stand analysis. The outstanding fact is that all bandits are propertyless and unemployed. According to custom, Chinese property was divided equally among his sons by the head of the family. Through a long period of time in which there had been a great increase in population, the inheritances became very small. Gradually through accident, sickness, or the expenses connected with marriages, births, and deaths, the majority of small property holders lost what little they possessed and the land became the possession of scholars, officials, and merchants. Then with increased importations and changing processes of manufacture, the industrial revolution in China, while enriching the middle and upper classes, is causing the poor to lose their property, if they had any, and to lose their usual employment. Thus under economic pressure—first indebtedness, then idleness, and lastly hunger—they free themselves from their misery by joining the kingdom of the bandits. "To say that these poor, wretched, malicious people are mere victims of flood or famine, or born bandits, or bandits by their own sweet will, is to ignore the weight of their economic environment."—*Journal of Race Development*, VIII-3, Jan. 1918. pp. 366-378. W. W. C.

WALLIN, J. E. WALLACE: FEEBLE-MINDEDNESS AND DELINQUENCY. Mental examinations of 1363 backward and troublesome public school children afford data for determining whether the percentage of feeble-mindedness is greater among the backward pupils who have a record of delinquency than among the backward pupils who have no such record. It is found that the percentage of feeble-minded among the delinquents is almost 12 per cent less than among the non-delinquents, or troublesome cases, while in the backward group there are 15.6 per cent more delinquents than non-delinquents. So, "it is the backward pupil (instead of the feeble-minded one) who creates the problems of discipline in the schools. . . . The slow, backward child is . . . a more aggressive and intelligent trouble maker, and constitutes potentially a greater criminal menace".—*Mental Hygiene*, 1-4, Oct. 1917. pp. 585-590. W. W. C.

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Number 1

A SURVEY OF TWENTY-FIVE HUNDRED PRISONERS IN THE PSYCHOPATHIC LABORATORY AT THE INDIANA STATE PRISON

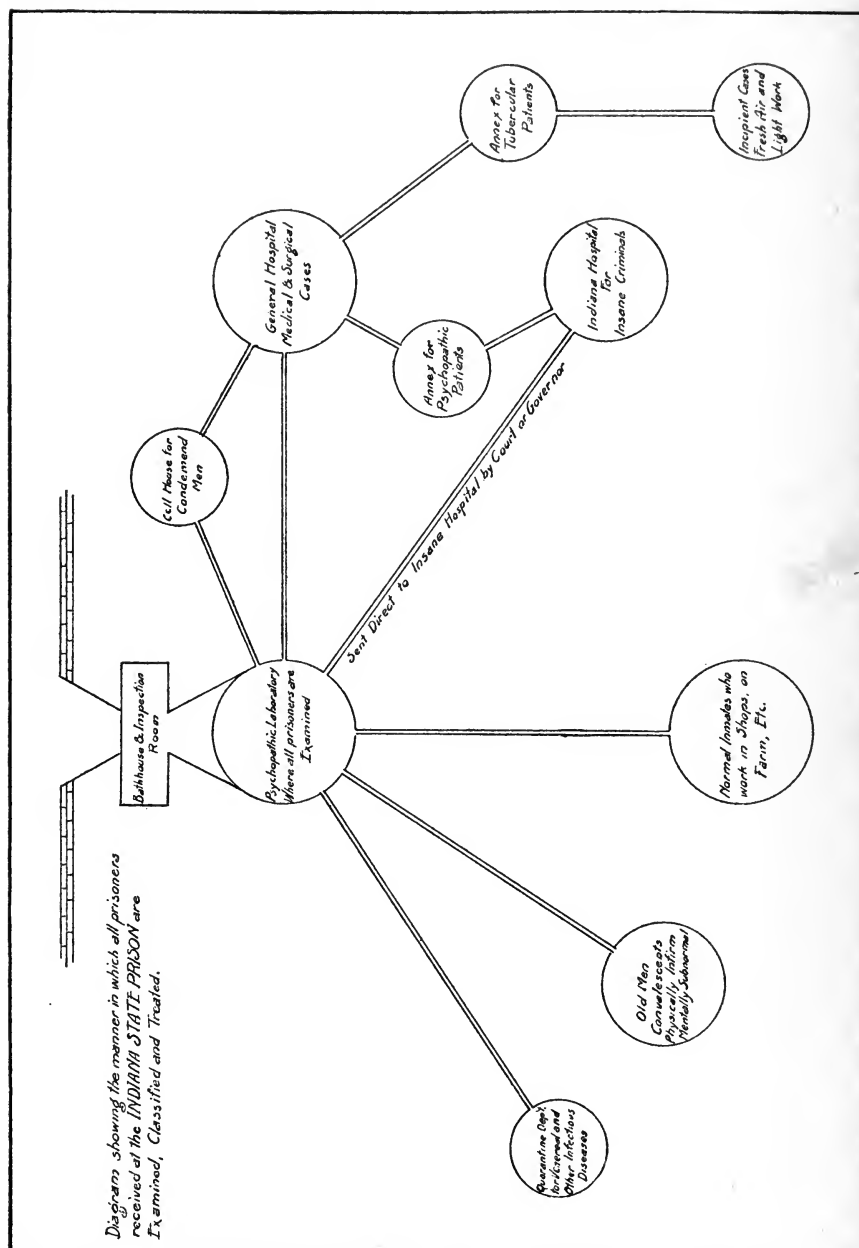
PAUL E. BOWERS, M. D.

Indiana State Prison

Indiana State Hospital For Insane Criminals

Within the last decade there have been made comprehensive study and careful investigation of crime and the criminal. Many of these studies have been exhaustive and intensive, and carried out upon lines more or less scientific and analytical. We may say with all due respect and consideration to the definition of the word science that criminalistics is rapidly taking the place that it deserves in the wide field of sociological sciences. Just at this point it would be well to acknowledge that the foundations upon which modern investigators are building the penalogical and criminological sciences were laid by the illustrious Caesar Lombroso. Of course, it is understood that we cannot agree with all his conclusions and deductions concerning the criminal or the forces which create him; but we are compelled by the spirit of fairmindedness to admit that he has blazed the trails and pointed the way into the field of criminal phenomena where the physician, the alienist, the psychologist, the jurist and the sociologist are pursuing their favorite themes, sometimes with a spirit of intense narrowness that hinders the progress, but, nevertheless, the results are being articulated, bit by bit, into a broad, well defined system of knowledge.

Just as rapidly as our penal institutions are removed from the control of petty politics, just so soon will greater progress be made along these lines. The welfare of society, the proper administration of prisons in all forms of their care of prisoners, demand that men of liberal training and scientific accomplishments shall be in charge.



In accord with the spirit of investigation there were established several years ago (1911) at the Indiana State Prison and the Indiana State Reformatory (1914), psychopathological laboratories for research in criminology. Since that time other institutions have inaugurated similar psychopathic clinics, among them the prisons of Massachusetts, Minnesota and very recently Sing Sing Prison in New York.

The purpose of this paper is to give a review of the work attempted at the psychopathic laboratory at the Indiana State Prison, where mental examinations, both psychiatric and psychological have been conducted for the past seven years.

The drawing accompanying this article gives a diagrammatic outline of the manner of classification and disposition of the prisoners received at the Indiana State Prison. Every individual received at this institution is given a complete biographical, physical and mental examination in the psychopathic laboratory of the prison hospital. The greatest care is taken in determining the physical status of the prisoner, making a detailed and comprehensive physical survey, employing all modern methods of searching physical diagnosis. Likewise a neurological examination is made. Following this, the individual is subjected to mental tests, psychiatric and psychologic, as employed in modern hospitals for the insane. The Binet-Simon scale of intelligence tests is also used where there is indication for its employment. A careful biographical statement is taken from the prisoner himself, and, of course, it goes without saying that these histories are not always correct; and much data that is given has to be taken *cum grano salis*. The prisoners' statements are supplemented, proven or disproven and qualified by information that is obtained from the officers of the court where the prisoners were sentenced. The state parole officers also contribute their share of information concerning the prisoners. Of course, these officers cannot obtain the data that a trained social worker might be able to gather, but on the whole the information received is fairly complete and reliable.

The psychopathological examinations given in the prison psychopathic laboratory at once point out the fact that prison population is a heterogeneous mass of individuals, who demand different varieties of treatment, and not the single remedy of punishment and imprisonment as has so long been given criminals by society through

its agents who care for its legal problems. A glance at the diagram will readily show what disposition is made of the prisoners.

Now and then persons are received at the institution suffering with acute infectious diseases. Many cases of acute and chronic gonorrhea, chancreoid and syphilis in all stages are received. These convicts are quarantined in the venereal department and there given the active, energetic treatment demanded in their respective cases, and as soon as it is safe to discharge them from this department they are again classified and sent to the divisions into which their mental and physical status may fall.

In every prison population there are to be found many decrepit, chronically diseased and senile persons who are unable to work at the various industries at the prison or on the prison farm, but who require custodial, convalescent care and treatment. These individuals are recognized at the time of their entrance examinations and are sent directly to this convalescent department in the prison dormitory.

The inmates here have been labelled by the prisoners as "Senators," this name is probably applied because of their garrulity; they are relieved from the strict observance of the letter of the law in prison discipline and a kind but firm supervision is held over them.

The normal and slightly defective prisoners are sent directly to work in the shops, on the prison farm and elsewhere as the disciplinary officer may direct.

The mental status of all these prisoners will be considered later. I find in my examinations in the institutional laboratory that many prisoners are in need of medical and surgical treatment at the time that they arrive at the institution, and these persons are at once placed in the hospital for the repairs needed in their cases. The prison hospital has four divisions, medical, surgical, psychopathic and tubercular. An individual showing mental abnormalities passes directly to the psychopathic ward for observation and treatment. Those suffering from open tuberculosis are at once transferred to the tubercular ward, but those in whom the disease is incipient or latent and who are still able to do light chores and work that would be helpful in their cases, are assigned to the prison yard.

The insane individuals sent by the order of the Governor or the courts are transferred directly, after their initial examination, to the Indiana Hospital for the Criminal Insane for observation and treatment.

When persons who have been under observation in the Psychopathic Annex in the prison hospital have shown themselves fit subjects for treatment in the Hospital for Insane Criminals, they are transferred by order of the Governor, after a properly qualified lunacy commission has found them to be insane. The men condemned to die in the electric chair are placed in the death-cell, which is under the hospital roof. These men are inspected by the prison physician twice daily and given such mental examination from time to time as may be found necessary.

There can be no doubt in the minds of those who come in intimate contact with delinquents that there exists a causal relationship between purely physical defects and crime. Of course, we cannot be hasty and dare not hurriedly indulge in unproven generalities or make deductions that bear only a resemblance to truth and accuracy. Again we must not mistake diseases and physical defects which exist purely as incidents of concomitant conditions of crime as causes of delinquency. No doubt the criminologists in times past have in their enthusiasm overrated the purely physical disease factor in the study of criminality. It will never be possible as a general rule to state specifically that this particular crime was a result of this definite physical disease or condition, since three forces are brought to bear upon the individual throughout his entire life, and his offense against the law is the resultant action of a triad of agencies; namely: social conventions, economic conditions and the individual's own psychophysical organization.

My investigations at the Indiana State Prison have shown that prisoners as a class are more physically defective than are the average citizens. Complete anthropological measurements were made in each instance, but these are not of particular interest, since their chief purpose was primarily for identification and, in fact, the measurement of the prisoner's physiological functions are far more important than the purely gross anatomical findings.

PHYSICAL CONDITION.

The physical condition of the two thousand five hundred prisoners on admission as shown by complete physical examination was as follows:

Good	1,435
Fair	664
Poor	401

Of course, these terms are more or less arbitrary, yet they indicate in a broad way the groups into which these individuals were divided as regards their status of health. We will now briefly review the chief diseases with which these men were afflicted. Over fifty per cent of them admitted that they had suffered from gonorrhea and about five per cent had acute gonorrhea upon admission to the prison. It is probable that many more than one-half had gonorrhea at some time in their lives, even though they did not admit it. About eight per cent of the men had a chronic gleet discharge or some other sequelae of gonorrhea, such as stricture, gonorrheal rheumatism, and there were three cases of endocarditis, due to the infection with the gonococcus. Nine hundred and thirty-four prisoners admitted having been inoculated with syphilis. A Wassermann reaction was made in some cases, but not all. A Wassermann examination, doubtless, if applied to each prisoner admitted, would reveal a much higher percentage than is shown here; but on the other hand, many individuals suffering with syphilis fail to show a positive Wassermann reaction, and since this number, nine hundred and thirty-four, did admit syphilis we can be sure that the real percentage of venereal infection would be very much higher. Paresis, tabes dorsalis and cerebral lues were not infrequent.

The bete noire of prisons is the white plague. There are many problems concerning this question which the penal institutions must solve, but no satisfactory solution can be found until existing legal conditions are remedied. Many cases of tuberculosis develop, no doubt, in prison, yet on the other hand penal institutions are unduly censored concerning the spread of tuberculosis. The prisoners are not altogether at fault, for we receive prisoners direct from the courts and jails, in advanced stages of tuberculosis. This fact again bears testimony to the obvious fault of our legal system, which too much considers the crime and not the man. As an illustration of this state of affairs, one prisoner died of pulmonary tuberculosis the day following his admission and he was only kept alive over night by the use of stimulants.

Of course, we find in prison, as we do in the civilian population outside, the usual diseases, but these physical ailments I do believe have a higher percentage in prisoners. Their ways of living on the outside, their vices, their dissipations and their environments materially contribute to poor health conditions. Cardiac lesions,

nephritis, arterio-sclerosis, diabetes, rheumatism, states of malnutrition and many other conditions of physical insolvency, are very common. Almost half of these men exhibited diseased dental conditions, most of them caused by neglect. Dental caries, pyorrhea, dental abscesses and other septic conditions about the mouth lead to a vast train of stomach disorders of which so many prisoners complain. Hernias, varicoceles and phimoses were extremely common. Defective hearing and defective eyesight is common; adenoids and enlarged tonsils were numerous. The physical stigmata were present in a very large percentage of cases. There were the various malformations of the skull, such as macrocephaly, microcephaly, archocephaly, plagiocephaly, dolichocephaly; diastema of the teeth, sharply arched palates, Darwinian ears, Morel ears, deformities of the helix and the lobule, polydactylism, hypertrichiasis, pigmentary retinitis, albinism, syndactylism, hypospadias and hermaphroditism, were frequently observed.

It may be hard many times to show a direct relationship between the just mentioned stigmata and crime, yet they are all to be found with defective states of mind, which hinder the individual in adjusting himself to his environments, and this hindrance of social adjustment frequently gives rise to criminal tendencies. Ocular troubles lead to nervous strain, headaches and states of nervousness. About fifty per cent of the prisoners show at the time of their entrance examinations some defects of vision. These defects may generally be classified under three heads: congenital defect, such as myopia, astigmatism and hypermetropia; errors of refraction, due to acquired disease or traumatism and various degrees of presbyopia due to an advance in years. The diseased dental conditions impair the digestion and may lead to infectious disorders of the stomach, and the enlarged tonsils and adenoids produce mouth-breathing which prevents proper aeration of the blood. The irritating condition attending phimosis contributes to sexual excitement which leads to masturbation, rape, sodomy and other sexual crimes. The existence of these pathological conditions just enumerated makes it impossible for children to get along properly in school or at work, hence they never reach the high ideals or attain the moral standards which education is likely to bring.

Out of twenty-five hundred prisoners the colored race represents almost twenty per cent, showing that there is a higher degree of criminality among the negroes than among the whites. The pro-

portion of negroes to whites in the state of Indiana is two and one-fourth per cent, and the proportion of the negro population to that of whites in prison as we have found is twenty per cent. But this is not at all strange when we stop to consider that they represent a more primitive race in whom the atavistic tendencies are much more pronounced. Our civilization has not left its imprint upon the negro's cerebrum to the degree that it has impressed the white man's.

COLOR

White	2,043
Colored	457

Illiteracy, superstition and emotionalism seem to be inherent characteristics of the colored race. The three agencies which we employ for the elevation of the Ethiopian are: religion, education and labor. "As to religion the negro is a religious animal, more animal than religious, but such religion as he has is emotional religion, closely allied to voodooism." Negro preachers in prison populations are very common, but the religion which they preach has but little relation to personal morality. The educational advantages of the colored race have been very limited. Prior to the great fraternal strife, the Civil War, when slavery was in vogue, the negro was not given an education; he was simply bred and reared, as it were, on the same plan as the stock. Then since the war the strides of education have been very slow below the Mason and Dixon line. Seventy-five per cent of colored prisoners received at the Indiana State Prison are of southern nativity, and when queried as to their educational accomplishments they frankly lay claim to very little if any at all. Thus ignorance holding the negro in her grasp, it is little wonder that his powers of discernment between right and wrong are limited and stultified, hence the colored race being in excess of the Caucasian in criminality.

Now as to the labor proposition, the negro as a rule performs only menial labor; he is not of a thrifty disposition, rarely accumulates a competency; his earning powers are limited and only a few of the colored people are tradesmen and artisans. The darkey is somewhat of the nature of the ephemeral insects, living from one day to another only. Then when Dame Fortune proves fickle and turns her back on him, when disaster, sickness and disease overtake him, he is easily pauperized and this is the first condition or impetus which leads to criminality.

The negro in the north is particularly subject to tuberculosis, which makes him dependent and criminal. About fifty per cent of tuberculosis in prisons is among negroes. Likewise venereal diseases are very prevalent among them, and with them, civilization has been synonymous with syphilization and we find among them many cases of locomotor ataxia, brain syphilis and not rarely the dementing type of general paresis. They are not infrequently given to crimes of violence and of the baser emotions, such as incest, rape and sodomy. But by far the greater number of their crimes is grand larceny. No less than fifteen per cent of them were users of cocaine and morphine, taken by way of the mouth, sniffing it in the nostrils and by means of the hypodermic needle. Imprisonment seems to be no great deterrent from crime among the colored people. The modern prison of the Northern states seems to hold no terror for him as long as his physical wants are cared for. He is usually very happy, literally a child of nature.

MEN EMPLOYED AND IDLE

Employed	1,394
Idle	1,106

These figures are very interesting and suggestive. From them we would form the opinion that a little over one-half of these prisoners were employed at the time they committed their crimes, but as a matter of fact they were not so occupied.

It can be said with absolute certainty that no less than seventy-five per cent of our prison population is composed of persons who are without mechanical or trade skill; who earn their means of livelihood in the crudest forms of physical labor to which they apply themselves irregularly and in a half-hearted manner. Their average wage income is to be classed at the lowest wage earning scale.

It has almost become proverbial that thievery, dishonesty and beggary go hand in hand with a lowest wage earning capacity. Those individuals who are without mechanical skill or trade knowledge, or, in other words, devoid of definite training in honorable pursuits, are most likely to resort to thievery as a means of subsistence.

Among these twenty-five hundred men, trained and skilled mechanics were very few and when one was found the institutional officials were indeed glad to find one prisoner, who even had a rudimentary knowledge of carpentry, bricklaying, plumbing or other forms of mechanical art.

The great fundamental fact that stands out in the critical survey of these men is that they were untrained in mechanics, unlettered, shiftless, improvident and irresponsible. Many of these prisoners are imbued with the idea that the world owes them a living and they attempt to collect this supposed debt in a manner that requires the least mental or physical effort. Many of them pretend to work at such occupations as following fairs, shows and circuses, peddling shoe-strings and pencils, cooking in camps, gathering junk, working as porters and cuspidor cleaners in saloons, working about livery and race-horse stables and as fake solicitors for magazines and other commodities. Even at these occupations they only apply themselves in a desultory and intermittent manner.

"The old saying that 'An idle brain is the devil's workshop' is literally true, and I would add to it, that: Idle hands are the devil's tools. Let us take from the devil his tools. Close the devil's workshop, and you will close the prison doors to the great majority of young men who are daily donning the felon's garb. This is the 'closed shop' that will close the principal avenue to crime."

ASSOCIATES

Good	310
Mixed	1,250
Bad	940

The associations of these men were as follows: Three hundred and ten claimed to have fostered good companionship. One thousand two hundred and fifty mingled with both good and bad in their business relations and private life. Nine hundred and forty sought the company of criminals, saloon and barrel-house keepers, habitues of houses of ill repute and houses of assignation, and that of frequenters of low-grade dance and billiard halls; in short, with persons generally of evil character. The influence of vicious associations cannot hardly be overestimated as a factor contributing to crime.

EDUCATIONAL STANDING

Illiterate	432
Read and write.....	680
Fourth grade	785
Eighth grade	496
High School	82
College	25

It is apparent that there is a relationship between the lack of education and criminality. Crime is much more common among the

illiterate than among the educated; in fact, about one-fourth of the population of our prisons today are almost wholly illiterate, while only about one per cent have a college education, which shows very plainly that but comparatively few college graduates ever become criminals. This simple fact goes far in proving that education reduces crime. Some of these illiterate and ignorant prisoners lacked the opportunity to secure even a rudimentary education, but they represented but a very small per cent. Others, through bad companionship, vicious associations, idleness and truancy deliberately threw away their chances to rise above illiteracy. In many instances the cause of their lack of education was an inability to learn because of mental defectiveness and such physical conditions as poor eyesight, adenoids, enlarged tonsils and defective hearing, all of which had a tendency to create a distaste for study and a condition of incorrigibility.

"The Federal Bureau of Education, from statistics applying to twenty states, has recently formulated these conclusions: (1) that about one-sixth of all the crime in the country is committed by persons wholly illiterate; (2) that about one-third of it is committed by persons practically illiterate; (3) that the proportion of criminals among the illiterate is about ten times as great as among those who have been instructed in the elements of a common-school education or beyond."

Victor Hugo gave his idea of the relationship of education to crime as follows: "Every school that is opened causes a prison to be closed." "A parent who sends his son into the world uneducated, and without skill in any art or science, does a great injury to mankind, as well as to his own family, for he defrauds the community of a useful citizen and bequeaths to it a nuisance."

AGE OF PRISONERS

Under 20 years.....	12
20 years and under 30 years.....	250
30 years and under 40 years.....	1,370
40 years and under 50 years.....	590
50 years and under 60 years.....	197
60 years and under 70 years.....	66
70 years and under 80 years.....	15

The statistics concerning the age of these men is quite interesting. At this institution no prisoners under thirty years of age are received except in the cases of men who have received life sentences.

It may be said of criminals in general that there are more criminals between the ages of twenty and thirty than of any other age and that the average age at which prisoners enter penal institutions is twenty-three.

According to our figures more men have entered the Indiana State Prison between the ages of thirty and forty. Old age is not free from crime, as may readily be seen from the above table. The crimes of the aged are generally the expressions of beginning or advanced mental disorders.

I have observed in a hundred and seventy-five cases of rape and attempts of rape that I have studied, that two-thirds of these sexual crimes were committed by decrepit and physically defective individuals, in whom the physical and mental signs of senile decay were evident.

In some instances in senile insanity, there develops a paranoid state with delusions which may be loosely organized, unsystematized and accompanied by auditory hallucinations; consciousness is fairly clear and orientation is but little disturbed. The emotions are exceedingly unstable, and tears and laughter can be alternately produced in a space of a few seconds. Homicides are frequently a symptom of this form of senile insanity. Approximately two per cent of all admissions to the Indiana State Prison are for incest. But it no doubt occasionally happens that some of the men convicted of incest are innocent, and that blackmail, hysteria and fraud play a part in such convictions.

During the last five years four and eight-tenths per cent of all the prisoners admitted to this institution were convicted of rape.

The average age of men convicted of rape admitted to the Indiana State Prison is forty-four years plus. Ninety per cent of them showed disorders of the nervous system and an increase or decrease of the tendon reflexes and a general condition of arteriosclerosis. Seventy-three per cent of them were married men in whom the habit of frequent intercourse was established. Sixty per cent of the cases of statutory rape were committed by men over fifty years of age.

RELIGION

Members of churches.....	1,056
Non-members of churches.....	444
Confessed religious belief.....	2,300

These figures show that ninety per cent of these prisoners were religious. By that I mean that this per cent professed belief in some organized religion or creed. Not all of them, of course, were active attendants upon divine services, but no less than one thousand took active part in religious services. The average prisoner is a religious person. He believes in creeds, rituals and ceremonies; they have a distinct psychological appeal to his nature, those religions especially which are rich in symbolisms. Negroes who already profess religious faiths such as the Baptist and Methodist become converted to the Roman Catholic faith; the ceremonies of this church have a great fascination for their childish minds. One-half of the prisoners professing religion were Roman Catholics.

Some of the men who are guilty of the most dastardly crimes, as rape on infant children, incest, sodomy, are most devoutly religious. One individual convicted of raping and murdering a young girl always said his prayers regularly several times a day and professed to be horror stricken when some of his companions had sworn while conversing with him. The profession of religion in general of these men does not seem to bear a direct relation to morality; they appear to regard these things as totally separate. They are intensely devout, but fear and not love, for their Creator, has governed their devotions. For them the profession and ceremonies of religions are easy, but the practice of morality in their social duties is well nigh impossible. As regards their religious professions they may be divided into three classes: (1) those who profess religion to impress their keepers with an idea of reformation to hasten their release from prison; (2) those who resort to religious exercises and professions of faith, rich in symbolism and ritualism, to secure a moral narcosis; (3) those who earnestly seek, as far as their warped judgments and emotional instabilities will permit, a real reformation in character.

I failed to find except on the very rarest occasions prisoners who were serious doubters of religion or intelligent agnostics or free-thinkers. In fact, I can almost say without fear of contradiction that there might be one in every thousand cases.

On the other hand we have to recognize that religion is probably the greatest force brought to bear on human conduct. Religion serves better for the suppression of crime than any police system that can be devised. Therefore we must always expect to use the element

of religion in dealing with the prisoners. If we can provide that this great influence be made synonymous with morality in their personal lives, great good can be accomplished.

USE OF TOBACCO

Chew	1,300
Smoke	1,800
Chew and smoke.....	1,700
Cigarettes	993
Non-users of tobacco.....	197

Prisoners as a class I found to be inveterate users of tobacco and most of them admitted that they began the use of this narcotic weed very early in life. It is very probable, however, that criminals do not use tobacco to any greater degree than do unconvicted persons. The figures within themselves are interesting, but one would be unwarranted in arriving at a conclusion that there was any definite relationship between the use of tobacco and crime.

HEREDITARY TAINT OF INSANITY, FEEBLE-MINDEDNESS AND OTHER PSYCHOPATHY

44 per cent, or.....1,100

The term hereditary taint is used to indicate that the prisoner's family history showed epilepsy, feeble-mindedness or insanity in his progenitors.

As to whether criminal traits may be inherited is still a question unsolved by criminologists, sociologists and psychiatrists. Many very prominent students of the criminal question have gone so far as to deny the existence of the inheritance of criminal characteristics per se. On the other hand, there are a few criminologists who still cling to the idea that criminal traits may be transmitted.

The results of the studies relating to this question are largely colored by the viewpoint of the investigator and of the previous conception he may have held concerning the matter. There are so many factors entering into an individual's life and behavior that it is practically impossible to pick from the ensemble of environment, economic factors, training, education, opportunity and heredity, and to say with accuracy that heredity was responsible in any given case of criminality. While this is the case the euthenists have been unable to bring sufficient data to disprove the claims of those who adhere to the direct inheritance theory.

My studies at the laboratory at the Indiana State Prison have shown very conclusively that criminality is indirectly inherited by reason of the fact that insanity, feeble-mindedness, epilepsy and other forms of psychopathy are inheritable conditions and these states of mental defect are most potent in the production of crime.

It was found at our institution that forty-four per cent of the twenty-five hundred men had a tainted heredity which was indirectly responsible for their crimes.

USE OF ALCOHOLIC LIQUORS

Abstainers	175
Moderate	250
Excess	2,075

One hundred and seventy-five of these prisoners professed not to be users of alcoholic liquors at all, two hundred and fifty admitted a moderate indulgence in intoxicating beverages, and two thousand and seventy-five were given to the excessive use of drink, getting drunk at very frequent intervals. It will never be possible to accurately say just how much crime is due to drinking. Large numbers of prisoners are dipsomaniacs; they possess neuropathic organizations; to them drinking is an expression of their defect, a contributing factor to their crimes rather than the immediate one. The disastrous effects of the narcotic, alcohol, on the brain and central nervous system are to be seen every day throughout the civilized world. Acute alcoholic intoxication or the ordinary form of drunkenness, from a psychological viewpoint, is but a transitory form of insanity. "Both psychologists and jurists have properly, however, maintained a distinction between those mental disturbances produced by the direct imbibition of alcoholic liquids, and which cease in a few hours after the imbibition ceases, and those mental derangements and hallucinations that may continue for days, weeks, or months after all use of alcohol has ceased."

The exact relationship that alcohol bears to crime is problematical and cannot with mathematical precision be determined. Prison authorities and especially prison surgeons know that many prisoners in order to excuse overt acts readily attribute their crimes to temporary states of drunkenness. Therefore statistics on alcoholism from penal institutions and reformers are to be taken *cum grano salis*, for they are more or less inaccurate.

The usual answer that I received from prisoners, during my examination of them, concerning the cause of their crimes, is generally one of this sort: "I was drunk; I did not know what I was doing; I may, or may not, be guilty; I cannot remember." These excuses for crime are so common and so easily made that the courts are extremely reluctant to place any confidence or value in them. In many instances, however, they are absolutely correct concerning the state of consciousness and memory. The crimes of acute alcoholism are petty thefts, larceny, forgery, rape, incest, sodomy, assaults and homicides. Petty thefts, obscene exhibitions and sexual crimes have been noted in alcoholic pseudo-paresis. Alcoholic hallucinosis, which is attended by hallucinations, especially of the auditory variety and persecutory delusions of a sexual nature, lead to homicide and homicidal attempts.

I have observed that a large number of wife murderers committed their crimes when reacting to delusions of marital infidelity relating to their wives. The same crime producing delusions and auditory hallucinations are characteristic of alcoholic pseudoparanoia. We usually find dipsomania to be dependent upon neuropathic heredity, diseased conditions brought about by trauma, lack of proper food, malnutrition and the inebriate is in fact a diseased person.

"The best statistics show that from seventy to eighty per cent of persons who drink spirits convulsively, and are called inebriates, have a defective heredity. All studies of the steady drinker show a profound and progressive impairment of all senses, functional activities of the body and reasoning. The more accurate the measurements are made, the more positive the deviation from the normal becomes."

"There can be little doubt but that much the larger number of those shocking homicides which disgrace the criminal annals of civilized countries, in which mothers or children, or both, have been suddenly slaughtered in the midst of the father's debauchery, have been the direct results of true paroxysms of mania a potu, such as we have briefly described. The medico-legal bearing of this class of cases deserves more thorough investigation than it has hitherto received. And as one attack of this form of mania leaves the patient more disposed to another whenever indulging in the use of alcoholic drink, they constitute the most dangerous class of inebriates."

It will be well to consider briefly the attitudes that society has entertained concerning alcoholism and responsibility. Lord Coke, of England, set forth the idea in his ruling in the seventeenth century that drunkenness and inebriety augmented a crime and misdemeanor and therefore called for an increase of punishment. For many years moralistic speculation and theories have determined in a large degree the attitude society has held toward drunkenness. The reformers and philanthropists have ever held the inebriate morally responsible. They have endeavored fruitlessly to rehabilitate the dipsomaniac by moral suasion, incriminations, insults and punishments.

It cannot be denied that moral treatments do exercise some influence in cases of inebriety, but they should always be secondary to medical and hygienic measures. Dr. Crothers, America's leading authority on alcoholism, convincingly states, relative to this phase of the subject, the following: "It is a delusion to interpret acts associated with premeditation and reasoning in inebriates as evidences of sanity. It is a delusion to consider inebriety and alcoholism as not impairing the sanity and integrity of the brain and body. It is a delusion to consider such persons as possessing free will and judgment with consciousness of their condition and ability of control. It is a delusion often repeated and has become incorporated in jurisprudence, that alcohol may be used to give capacity to commit crime. In reality this is true, but in a very narrow limit.

"The exciting stage following the use of alcohol might be limited to ten minutes or an hour, but after that there is no certainty that any act premeditated could be carried out. The fact is sustained by unmistakable evidence that all crimes committed by such persons are the acts of defective minds. All this signifies a recognition of the condition of the criminal, not to diminish the punishment, but to change it to more rational lines. Criminals of this class need control, care and changed conditions. They are clearly defectives and degenerates who have lost the power of rational thought and conduct."

The positions taken by our courts on the subject of intoxication are contradictory and illogical. If an individual in a state of intoxication makes a will, signs a contract, a deed, a promissory note, or a bank check, the courts of law do not hold such papers and testaments as valid or legal, if a proof of intoxication can be brought to

bear. Law in this case questions and even denies the responsibility and the capacity of an intoxicated individual to execute a legal instrument. In the practice of criminal law this is quite the reverse. If a drunken man commits a crime while intoxicated he is held to be responsible and qualified to commit a crime. Yet psychologically and physiologically, the mental impairment, the lack of reason and judgment and the incapacity to act normally are just the same whether an offense be committed against the criminal or the civil law. Our conceptions concerning alcoholism and responsibility must change.

Society in general and law in particular still look upon an individual as a possessor of an absolutely free will. Is not this doctrine an unsubstantiated metaphysical hypothesis? Can we look upon intemperance as *prima facie* evidence of deliberate viciousness? This is hardly possible in the light of recent research.

It has been demonstrated beyond the shadow of a doubt that the dipsomaniac is always a neurotic. His nervous system is impaired by heredity, disease or trauma. The defects of his brain and central nervous system produce at intervals an insatiable, uncontrollable craving for alcoholic stimulants.

The medicolegal aspects of the narcotic drug habits need to be more carefully studied than they have been in the past. Eight per cent of the prisoners received at the Indiana State Prison are users of cocaine, morphine or other narcotic drugs. Fully five per cent of all crimes for which prisoners were committed to this institution were due directly or indirectly to the use of these agents.

The victim of morphinic insanity is absolutely a slave to the almost insatiable desire that possesses him to use opium or any of its alkaloids. The moral degradation and misery of oxymorphinism will lead the habitue into the performance of any crime in his efforts to secure morphia. The drug victims will commit larceny, burglary, forgery, arson, blackmail, homicidal attempts, murder and sexual crimes to satisfy their morbid cravings. Women have been known many times to prostitute themselves to secure the drug. A very large per cent of the commercial prostitutes are morphinomaniacs. The psychopathic disturbances of morphinism frequently develop a depressive and melancholy character and these are attended by delusions of persecution and a tendency to suicide. Occasionally states of incoherence, confusion and mania are observed, during which periods homicidal attempts are frequently made.

Police Surgeon Dr. Guimball, who has had a wide experience with criminal drug habitues, says: "First, morphine causes defects of attention, particularly of sense observations; second, the ethical sense is blurred, the victim is unable to discriminate any moral basis that should dominate, he acts from impulse; third, his will is lost and power of control over the impulses lessened, both physical and mental impulses dominate him from the slightest exciting causes; fourth, the morphinist is literally a lunatic, only more subtle and concealed, like the dipsomaniac he is liable to be dominated any moment by impulses that are unforeseen; fifth, the responsibility, like judgment, is impaired and enfeebled; he is constantly doing acts and saying things the import of which he does not understand."

The criminal manifestations of cocaine insanity are essentially those of morphinism, except possibly they are slightly more profound. The cocainists as a rule are very easily irritated and their conduct is largely governed by violent impulses. Pronounced changes in their character take place. The patients become dishonest and deceitful, and seem to possess a morbid propensity for lying. The will power is markedly enfeebled; all sense of moral or legal responsibility is weakened; reason and judgment are greatly impaired. The development of a paranoid state is a very common occurrence. The victim develops and entertains delusions of a persecutory nature; he becomes suspicious of his wife's attitude toward other men. Frequent homicidal assaults grow out of these delusions of marital infidelity. Erlenmeyer has observed that the sudden withdrawal of the drug from the cocaine fiend often induces a profound state of depression and delirium which is accompanied by persecutory delusions that render the individual an extremely dangerous person. Suicide is not an infrequent termination of chronic intoxication.

The statistics in Table I speak for themselves and do not need, so far as this article is concerned, any explanation or comment. They may be of special interest to the sociologist and criminologist.

The most interesting of all criminological work, and in fact, the principal aim and duty of a psychopathic laboratory in a prison, is to determine the relationship of mental defect to crime.

In treating this question I have endeavored to show how crime is sometimes a part of the symptom-complex of the various mental diseases. Each form of the essential insanities will be dealt with separately in the following order: epileptic insanity, paranoia, general

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TABLE I.
Age Leaving Home.

Five to ten years.....	165
Eleven to fifteen years.....	690
Sixteen to twenty years.....	784
Twenty-one and over.....	834
Unknown	27

Civil Conditions.

Single	812
Married, living together.....	845
Widowed	248
Divorced	316
Separated	279

Habits of Prisoners' Parents.

Intemperate fathers	859
Intemperate mothers.....	24
Both parents temperate.....	1,325
Both parents intemperate.....	150
Unknown	63

Civil Condition of Parents.

Parents living together.....	456
Parents separated	224
Father dead	453
Mother dead	63
Both parents dead.....	983
Unknown	321

Age of Prisoners.

Under 20 years.....	12
20 years and under 30 years.....	250
30 years and under 40 years.....	1,370
40 years and under 50 years.....	590
50 years and under 60 years.....	197
60 years and under 70 years.....	66
70 years and under 80 years.....	15

Number of Former Prison Convictions.

One	528
Two	365
Three	387
Four	126
Five	54
Six	32
Seven	9
Eight	10
None	989

Terms of Sentence

Death	9
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Life	261
20 to 30 years.....	3
10 to 20 years.....	48
5 to 21 years.....	2
5 to 14 years.....	40
3 to 15 years.....	28
3 to 14 years.....	4
2 to 21 years.....	233
2 to 14 years.....	661
2 to 10 years.....	2
2 to 5 years.....	61
1 to 14 years.....	347
1 to 8 years.....	585
1 to 7 years.....	79
1 to 5 years.....	62
1 to 3 years.....	24
6 months to 5 years.....	19
Criminal insane	32
Mental Diagnosis.	
Active	500
Fair	250
Dull	175
Feeble-minded	675
Insane	250
Epileptic	200
Psychopathic	450

paresis, cerebral syphilis, manic-depressive insanity, dementia praecox, senile psychoses, puerperal insanity, hysterical insanity, psychopathic personalities, constitutional inferiorities and feeble-mindedness.

EPILEPSY.

History is replete with examples of the causal relationship that this disease has sustained to delinquency. The remotest ages of antiquity furnish us very striking instances.

Mythology tells us that Hercules murdered his wife, Ophelia, and their children, during one of those unconscious automatic states that are characteristic of epilepsy. Seneca tells us: "One day, as Hercules was offering a sacrifice to Jupiter, he suddenly stopped, rolled his bloodshot eyes in a hideous manner, the saliva ran down his beard, his smile was convulsive and strained, and laying aside his garments, he became very much agitated. They thought he had returned to his senses, when he suddenly rushed to his weapons, ran after his father, his own children, and everybody, until finally he slew his wife and

children. He was about slaying his father when Pallas appeared and checked him, throwing him on the ground. Then he quickly fell into a profound sleep. As he awoke the sight of all the slain around him terrified him and his despair became extreme when the news was broken to him that he alone was the author of all this slaughter."

Epilepsy is probably responsible for more pathological offenses than any other form of positive mental disease. It is very common for prison physicians to observe that many prisoners have distinct dizzy spells, and these are many times true forms of petit mal which may be overlooked by a careless mental examination.

Marked changes in the morals and the emotions are most constant characteristics. The epileptics, as a rule, are most mercurial and volatile in their temperaments; the merest trifles are sufficient to stir them to serious outbreaks of temper and violence. They are radicals of the most extreme type, and especially this is true in the sphere of religion and politics.

Their manner of living and their modes of behavior are practically regulated by their appetites; they love power and notoriety, and they shrewdly use immoral and illegal methods to secure these; they are extreme sensualists and they are prone to commit sexual crimes such as rape, incest and sodomy.

Delusions of persecution are common characteristics of the epileptic mental degeneration and therefore it is very easy to see why dangerous assaults should be so common among epileptics with their hair-trigger temperaments, their lack of emotional control and their impetuosity.

Clouston has well said that, "Murder by an epileptic should be looked upon as being as much a symptom of his disease as is larceny by the general parietic."

Delasiauve forcibly stated, "It is certain that on passing an epileptic, we elbow one who might be an assassin, and that epilepsy, through the delusional ideas it originates, furnishes a considerable share of the crimes ascribed to mental alienation."

The phenomenon of epileptic automatism has long been observed, but a concise explanation of this phase of the disease has not as yet been offered. We know, however, that some epileptics complete certain definite acts in a seemingly conscious and coherent manner. But

in reality consciousness is practically blotted out, and when the individual regains his mental status, there is likely to be no memory of any of the acts that he may have committed during such periods, or if he does have any memory it is usually but an indistinct hypnogogic idea that closely corresponds to the dreamstate.

The automatic acts of the post-epileptic stage more frequently follow the petit mal paroxysm and it is rare for criminal acts to be committed following a severe form of the major paroxysm. It is usually the rule that the actions which are performed in a post-epileptic automatic state are always the same in character; the act performed usually portrays in some manner an habitual movement that is customary to be made in normal consciousness. And in the consideration of epileptic criminal acts we must bear these facts in mind. If called upon to give expert testimony as to the responsibility for criminal acts that may have been performed by an epileptic in the post or pre-epileptic automatic state we must determine if the overt act was habitual in any character or if the person was accustomed to performing similar actions when "at himself."

It would be in perfect harmony with the observations that have been made to find an epileptic butcher having assaulted another with a knife, nor would it be strange to find a soldier in a post-epileptic state shooting an individual.

The handling of a knife or a gun are habitual acts of the butcher and the soldier respectively; but should a butcher kill a person by administration of poison, we should be exceedingly slow to regard such a crime as an expression of epilepsy, since the handling of drugs is a foreign procedure to the act of cutting meat.

The condition known as psychical epilepsy is one in which the paroxysm is replaced by a nervous storm which is not accompanied by the usual signs of epilepsy. "Psychic epileptics may commit all manner of crimes; thefts, arson, rape, assaults and homicides. They are not infrequently pyromaniacs, entirely without reason or impelled by the flimsiest motives."

"The medicolegal aspects of this type of epilepsy depend, so far as responsibility is concerned, upon our ability to determine the existence of the automatic state at the given moment. This may be difficult to do beyond reasonable doubt, though if we can prove the person is a sufferer from epilepsy at the time, or ever had it in any form,

we can always create a reasonable belief that the patient may have acted while in a seizure, without any intent whatever, and under conditions that should free him from responsibility.

"The evidence of the presence of epilepsy * * * * * needs to be carefully studied in order to arrive at a just conclusion in medicolegal cases. If it can be proven beyond reasonable doubt that the individual has epilepsy, the question of responsibility is not difficult after that. We may not be able, it is true, to say positively that he was under the influence of a seizure at the moment an overt act was committed, while, on the other hand, we are equally as unable to prove that seizure was not present. Psychic convulsions defy all ordinary methods of detection. They can be readily noted, however, by one trained in the observance of their expression."

PARANOIA AND PARANOID STATES.

Paranoia and allied paranoid states furnish us with a very large quota of pathological crimes. The most common of these are homicides, homicidal attempts, assault and battery, blackmail, perjury, impersonation of officers and sexual crimes. The most dangerous of all insane patients is the one who harbours in the recesses of his diseased mentality systematized delusions of persecution. This is especially true of the paranoiac, who many times appears to be intellectually normal and occasionally, aside from his paranoidal tendencies, he may be the superior of the average individual. The proper perspectives of life are impossible for the paranoiac since each instance and circumstance is colored and tinged by an abnormal sensibility and reaction to the most commonplace and trivial affairs.

The paranoiac in the stage of persecution, out of the most insignificant circumstance, constructs a nebula of persecutory ideas which are intangible and obscure. Finally these hazy, indistinct ideas of persecution take a more definite character, and then, step by step, supportive and contributive ideas are formed and elaborated which build up a definite, systematized, delusional preconception or system of thought through which must pass every idea that is translated into action.

This delusional formation is so closely and intimately connected with the whole of consciousness, that it regulates and dominates the individual's manner of feeling, thinking and acting. It is easy to see, therefore, that any paranoiac is a potential homicide while har-

boring delusions of persecution. Should he believe that his supposed enemies have designs upon his life, or that they desire to make him the butt of their ridicule, or the object of some diabolical conspiracy, it is not at all strange that the persecuted should turn persecutor.

He employs logical methods of argument to convince himself that imposed upon them, and while many of the religious mystics are ex- he is perfectly right in seeking means to protect himself against machinations, and should he ever be called into court to explain some of his erratic behavior, he is more than convinced that he is justified in seeking any measure that he may see fit to employ.

Paranoiacs of the religious variety often come into conflict with the law directly through their insane beliefs concerning religion, and examples of religious paranoia are not uncommon. They often feel that they have been commissioned by God to deliver humanity from its sin, or to perform some other mission which the Deity may have tremely harmless, there are those who are decidedly dangerous to society when anyone attempts to contradict their insane ideas, for they regard such imputations as direct sacrilege and effrontery to Deity and may feel themselves designated to kill those who denied their religious pretensions.

The socialistic orators of the curbstone variety, the propagandist and religious reformers who become leaders of such anarchistic organizations as the I. W. W., or of such societies as the Holy Rollers, are individuals of the paranoid type.

GENERAL PARESIS.

The crimes of general paresis as compared to epilepsy, dementia praecox and paranoid states are comparatively rare. Of two hundred and five admissions to the Indiana Hospital for Insane Criminals, but five patients were general paretics.

The criminal offenses of general paralysis generally fall into one of the following categories: immorality, alcoholic debauch, indecent behavior, thievery, dishonest speculation, forgery, and very rarely homicide and suicide. The misdemeanors of paresis generally occur in the incipient stages of this disease. The moral qualities of the mind share in a very large way in the general degeneration. Very often the moral symptoms are the first to point to paresis. The paretic fails to understand and seems entirely oblivious to the moral relations that he sustains to society and to his family. His speech, which was

formerly chaste and decent, becomes filled with profanity and obscenity.

The once temperate individual indulges in wild alcoholic debauches, and the formerly respectable husband and father seeks the company of the public prostitute openly and without shame.

"Volition, as the highest function of the mind, is one of the first to suffer in general paresis. The loss of control, both of actions and of ideas, is one of the earliest symptoms, and in the fully developed stages there is no longer any volitional direction of the thoughts, and consciousness is filled with the creations of a morbid phantasy, and with such sensorial impressions as chance to rise. This feature of will power and of all persistency of purpose makes the general paretic a comparatively easy subject for management."

The paretic manner of committing misdemeanors, and the environments and circumstances attending them generally, leave room for little doubt as to the source and nature of their real origin. The patient has no apparent knowledge of the quality and nature of his overt acts. The paretic seldom tries to hide his crime and he displays no foresight or caution. If on a tour in a department store, the rich and well-to-do patient may steal articles of small value, such as handkerchiefs and gloves. He will pocket them under the eye of the clerk in a state of apparent forgetfulness after having examined them as a prospective buyer.

Magnan recites the case of a paretic who asked the aid of a policeman to help him steal a barrel of wine. The perfect frankness, innocence and apparent reasonableness of the request made upon the policeman, so impressed him, that he assisted the paretic to carry out his theft.

"The apparent kleptomaniacal propensities of the general paretic consist mostly in an automatic appropriation of whatever articles attract his attention rather than in any perverse desire to steal, and in the demented stage he still continues to accumulate things when he is no longer capable of making any distinction as to ownership."

Under the dominating influence of grandiose delusions, the victim of paresis forges checks, makes fraudulent claims on property, gives false promissory notes, makes wild speculations in the market and undertakes impossible financial operations without apparent knowledge of the quality of his acts.

CEREBRAL SYPHILIS.

Psychopathic states are likely to develop during any stage of syphilis, but they more commonly occur during the secondary and tertiary periods. They appear in the form of a delirious mania or acute depression. There is a profound disturbance of the moral and emotional qualities. The maniacal excitement may consist of any degree of psychomotor activity ranging from simple cerebral excitement to a state of mania attended by automatic agitation, incoherence and violence. After this state of mental alienation, there may follow a mental lethargy and sluggishness, a clouding of consciousness, a defective ideation and a perversion of the sentiments. In the depressed form of acute syphilitic insanity, the patient is often exceedingly morose and sullen, he may entertain delusions of persecution, he may be fearful of poisoning or of secret enemies; the delusions are usually attended by olfactory, gustatory, and aural hallucinations.

“In some cases the psychical defect may show itself in the field of the moral sentiments by indifference, brutal conduct, selfishness, and a tendency to revelry.

“Among the early symptoms are irritability, culminating in alarming explosions of anger or in acts of violence. Suspicion, too, is heightened, and takes the form of delusions of persecution. These delusions often arise from the many strange and annoying sensations to which the patient is subject, and which he seeks to explain by reference to external agencies. Thus the paraesthesiae are attributed to electricity or irritating gases, which enemies use as a means of torment. The hallucinations of taste and smell, which may be due to local syphilitic processes, lead to delusions of poisoning or of foul odors, which patients believe are generated in their rooms at night to injure their health.

“Hallucinations of sight and of hearing are also common, and they are often the result of specific lesions of the organs of sense; their general character, furthermore, is disagreeable, like the prevailing emotional tone, and they sometimes re-enforce, and at other times they are the sole origin of the delusions of persecution.

“The diagnosis of syphilitic insanity must rest not only on the history of specific infection, but also on the actual presence of syphilitic lesions, which may reasonably be supposed to bear a causative relation to the mental disease. If the physician is called to pro-

nounce an opinion in a case with something like the following medley of symptoms, he need not hesitate to diagnose syphilitic insanity. These symptoms are not all supposed to be present in a single case, and a few of them would suffice for a diagnosis; they are chiefly as follows: great irritability and violent outbreaks of temper, confusion of ideas and loss of memory, exacerbations of mania or of hypochondriacal melancholia, and a constantly progressive dementia, accompanied by cephalalgia, insomnia, vertigo, syncope, apoplectiform attacks, sudden and temporary paralysis of cranial nerves, loss of power in single muscles or in one arm or leg, loss of sight and optic neuritis or loss of hearing, and sudden and unaccountable remissions in all the symptoms."

MANIC-DEPRESSIVE INSANITY.

The crimes of the manic-depressive psychoses are relatively infrequent.

The alternate cycles of good behavior and freedom, crime and imprisonment which I have noticed in habitual criminals somewhat resemble the manic-depressive psychosis with its intervals of lucidity, separated by periods of depression and excitement. In the period of remission of the cyclic form of criminality the prisoner is exceedingly well behaved and often takes a very active part in the religious services and societies at the prison, and often it is thought that this individual has reformed and that he will become a model citizen. He is sooner or later discharged from prison and he does exceedingly well for a limited period of time. But shortly our hopes are dashed to the ground, for a second cycle of criminality develops; new crimes are committed and the individual is returned to the prison from which he was but recently discharged or is sent to some institution in another state.

DEPRESSIVE PHASE.

The most common violent act of this phase is suicide.

All melancholic patients are potential suicides, and in a state of rapture this act is frequently performed in public and without premeditation. The depressive patient sometimes becomes so occupied with a single idea that it amounts to an obsession. These ideas are often very terrifying and brutal, and because they occupy the entire field of consciousness, there often develops a state of "raptus melancholicus," in which their absorbing obsessions are translated into

murder, vicious assaults, mutilations of the body, especially those of the genitals and the most painful forms of suicide.

Consciousness is markedly clouded in these outbreaks by delirious passion, and the memory, if retained at all, is imperfect and hazy concerning any actions performed during this period. In the state of raptus guided by a delusional sympathy, a mother will murder her children to protect them from hardship, trials and supposed evils with which she thinks they are threatened.

An individual once made an attack on an English king, knowing that such a crime would result in his death; he was impressed with ideas of his own sinfulness and unworthiness and thought that his own death was necessary for the good of humanity, but because he was so scrupulous about the sin of suicide, he assaulted the king, knowing that the punishment for this act was death.

MANIC PHASE.

The crimes of the manic phase are also rare. The extreme psychomotor activity interferes with the accomplishment of definite criminal acts. The patient is destructive rather than criminal; he is given to the demolition of furniture, mirrors and window panes. They not infrequently disturb public peace by running amuck through public thoroughfares. They often frequent saloons, and indulge heavily in liquor, thereby becoming obstreperous and unruly in public places. The ordinary womanly modesty is frequently lost in the manic phase.

The female patients of this type are often arrested and charged with public indecency and exposure. Nymphomania, kleptomania and dipsomania are not uncommon symptoms.

The maniacal excitement occasionally assumes a character of extreme fury and frenzy during which vicious assaults and homicides are committed.

DEMENTIA PRAECOX.

The crimes of those suffering from dementia praecox partake of the fundamental basic characteristics of mental enfeeblement that mark this psychosis.

The misdemeanors and unlawful offenses of those affected with this disease are characterized by more or less defect of reason and judgment, a marked emotional poverty, a more or less complete state of indifference, a condition of puerility and often a thoughtless, senseless, and impulsive brutality.

A very large number of the violations of the law committed by insane persons are directly chargeable to dementia praecox.

"Many of these cases go to swell the ranks of the criminals, the prostitutes, and hoboos, and are often mistaken for cases of feeble-mindedness. Wilmans, in a study of one hundred and twenty-seven vagabonds, found sixty-six cases of dementia praecox."

Cases of arrested dementia praecox are often noted in prison. In these types of this disease, the progress of the underlying dementia is inhibited, and though the psychosis fails to reach a stage of dementia, the individual never again reaches his own normal mental status.

A distinct difference corresponding to the three main divisions of dementia praecox is shown in the character and the circumstances attending the crimes committed by the patients with this disorder.

The crimes and misdemeanors of hebephrenia partake of the character of this form of dementia praecox—the crimes are petit larceny, trespass, vagabondage, drunkenness, the breaking of boxcars, sexual offenses, and public prostitution in the female.

The offenses which oftentimes go to make a part of the catatonic symptom-complex occur with much less frequency than in the paranoid and hebephrenic form.

The crimes and misdemeanors of this type are marked by impulsiveness, a lack of premeditation, thoughtlessness and usually no effort is made by the patient to escape the consequences entailed by criminal actions. The catatonic makes vicious assaults, commits murder, and destroys property by incendiarism.

The paranoid form furnishes a large number of criminals; the delusions of persecution lead to assault, homicide, theft of property, blackmail, and perjury.

The crimes of hebephrenia and paranoid dementia praecox are about equal in number.

SENILE PSYCHOSES.

It is commonly observed that, as the period of senescence approaches, the fires of passion are cooled, the ambitions of youth are quieted, the scheming and planning of youthfulness for the future successes and work to be accomplished ceases, and all is changed into a life of reminiscences, metaphysical and religious speculation. We pay the proverbial reverence for gray hair, the stooped form, the

slow, unsteady, tottering gait, and for the kindly human sympathy so characteristic of the aged.

In marked contrast, this senile period of mental and physical decay is not always attended by a peaceful and undisturbed serenity. Occasionally there is a profound moral deterioration; an even quiet spirit gives way to excessive irritability; the senile dement objects to any change in his manner of living; he becomes exceedingly egotistical and unreasonable; he makes senseless demands upon his wife and children, and it is not an uncommon occurrence for vicious assaults to be made on them, should they neglect his slightest whim.

The formerly chaste and respected individual becomes intemperate, his conversation is filled with coarse and obscene remarks. Satyriasis is not an uncommon symptom, and this manifests itself in acts of rape, especially on young female children, or by disgraceful or bigamous marriages and indecent exposure of person.

I have observed in a hundred and seventy-five cases of rape and attempts of rape that I have studied, that two-thirds of these sexual crimes were committed by decrepit and physically defective individuals, in whom the physical and mental signs of senile decay were evident.

In some instances of senile insanity, there develops a paranoid state with delusions which may be loosely organized, systematized and accompanied by auditory hallucinations; consciousness is fairly clear and orientation is but little disturbed. The emotions are exceedingly unstable, and tears and laughter can be alternately produced in a space of a few seconds. Homicides are frequently a symptom of this form of senile insanity.

Regis, in speaking of misdemeanors and crime of senile insanity, says: "Their actions all carry the stamp of dementia. They are: absurd and infantile thefts, like those of general paralytics, but even more foolish; sudden and causeless fits of passion; ridiculous and heedless attempts at suicide; there are also especially libidinous actions, obscene exhibitions of themselves in public, attempts at rape, unnatural crimes, all resulting from lack of conscience and absolute loss of the feeling of modesty.

ARTERIOSCLEROTIC DEMENTIA.

The unlawful acts of this psychosis are essentially the same in character as those of senile dementia, with the possible exception that

homicide and homicidal attempts are slightly more frequent because of the paranoid nature of the delusions and the hallucinations entertained by this class of patients. Their crimes usually show a little more premeditation, lucidity, provision and foresight to escape the consequences of illegal acts.

TRAUMATIC PSYCHOSIS AND TRAUMATIC PSYCHOPATHIC STATES.

The term traumatic insanity has been applied to a certain group of psychotic symptoms of more or less definite clinical character, the origin of which may be traced to some injury to the head or the spine.

These psychic symptoms occur more often in those cases in which there has been an extensive injury, great pressure or concussion to the brain substance, than in those in which the cerebral injury is restricted to a single limited area.

The mental symptoms following a head injury may often be divided into two classes, namely, a delirious state, and one of mental enfeeblement.

Crime more frequently occurs as a symptom in the condition of traumatic feeble-mindedness than it does in the state of traumatic delirium.

Immediately following an injury to the head or spine there may develop a state of unconsciousness which lasts a longer or shorter period of time. When consciousness is regained, the patient usually fails to remember anything of the accidents or happenings that occurred a short time before. Ordinarily after the injury the subject is soon restored to normal, and for weeks, months, or even years, he may not display any signs of mental failure.

The first symptom of the mental disorder that is noted is an insidious change in the patient's disposition; he becomes egotistical, irritable, fault finding and morose; he has periods of despondency and depression; he worries about his health, financial matters and kindred affairs; his moral sense becomes weakened, his judgment and reason are impaired, violent outbreaks of temper occur, and to allay his unpleasant and distraught feelings he often resorts to the excessive use of alcoholic beverages, to which he shows a pathological reaction.

The psychopathic state just described creates a most favorable disposition for the perpetration of crimes and misdemeanors and the

instances are by no means rare in which the violation of the law show their direct origin to cerebral trauma.

PUERPERAL INSANITY.

Puerperal insanity is a generic term applied to certain psychotic symptoms which occasionally attend the physiological epochs of pregnancy, parturition and lactation in those who possess a hereditary predisposition. The causal factors operating to produce this psychosis are the lack of proper medical attention at the time of childbirth, the infection and exhaustion, shock and hemorrhage, the mental anxiety and fear attending this physiological cataclysm. It has been claimed that this mental disturbance takes place about twice as often in illegitimate pregnancies as in legitimate ones. This fact seems to indicate that the psychogenic factor of worry, remorse and shame exert a tremendous influence for the production of this disorder.

Occasionally violent states of mania and frenzy are noted in puerperal insanity and during these periods of great motor excitement, restlessness and delirium, criminal acts are committed, and chief among them are induced abortion, infanticide, suicide and homicide.

A large percentage of infanticides may be charged to the insanity attending the puerperium. It is a strange perversion of the material instinct for a mother to murder her helpless offspring, and in every case of puerperal insanity, the infant should be taken from its mother.

It seems as if this mental disorder is not alone confined to human beings. It is a well known fact that horses, cows, rabbits, squirrels and cats often kill their young at the time of birth or soon after. It is a very frequent occurrence for a female hog to kill and devour her entire litter.

"When the disease develops at this time, delirium is common, particularly in cases occurring early—before the fourteenth day. Here also there are, in at least half the cases closely observed, prodromal symptoms during pregnancy. These symptoms may have been overlooked or the offset may arise with startling suddenness accompanied by suicidal or homicidal tendencies. Fever, which is commonly present, may be very high in septic cases. If the patient is maniacal, which is the most common type, she is sleepless and violent and attempts to destroy those about her. There are delusions and hallucinations. The ideas and language of the patient flash from

her with remarkable rapidity and incessant change. Now sensuous, obscene, profane, and making attempts at self-exposure; in an instant she may revert to religious ideas, to indulge in prayers and the singing of hymns. In one case, that of an illegitimately pregnant colored girl of nineteen, the writer was thought to be the Almighty, from whom the girl piteously besought pardon for her sins. The moment while counting her pulse he was turned upon with a frenzy from which he barely escaped, the patient, now terrorized by his presence, believing him to be Satan himself, upon whom she spat with fury. Within a very short time he left her singing a Sunday school song, which was soon followed by word pictures of obscene situations mingled with revolting profanity. Melancholia in the puerperium occurs less frequently than mania—usually after the fourteenth day—and it is apt to be accompanied by persistent attempts at suicide, requiring unremitting watchfulness on the part of the attendants; delusions involving frequently the husband's fidelity, and hallucinations of sight and hearing are commonly present."

HYSTERICAL INSANITY .

It is not at all to be wondered at that crimes, misdemeanors and the violations of morality should be found in the symptom-complex of hysterical insanity.

The exaggerated impressionability to external stimuli, the abnormal tendency to simulation, the excessive emotionalism, the volitional impairment, render the patient a plaything of his whims and passion, and the easy victim of evil circumstances.

The combination of these named psychic attributes of this mental anomaly create or constitute a condition of moral incoordination.

Delusions of persecution are to be expected in the hysteric whose abnormal sensitivity to the slightest irritating trifles translates the most common relations of life into schemes and machinations for his injury. And it naturally follows that homicidal assaults should grow out of this disordered paranoid state of mind.

The basic eroticism of hysteria leads to sexual crimes; the hysterical ascetic in his life of imperfectly impressed sexual desires and celibacy often sinks to a state of homosexuality, which finds relief in such sexual crimes as sodomy and bestiality. Other hysterics, through fear of venereal disease, through a dread of shame, and a horror of being detected in illicit sexual relations, frequently commit rape on infant children.

Individuals of this type are to be found in every prison. Often overt acts are perpetrated in the periodic episodes of this psychoneurosis that are attended by states of amnesia.

"Many of the cases of blackmail and false accusations against physicians may be credited to this form of hysteric derangement in females, and we have known one or two striking instances of the kind. One, a young woman, well connected, but cut loose from her family and rather repudiated by her relatives, used to frequent doctors' offices and have hysteric attacks there, and in one or two cases, at least, attempted to get up compromising situations, and once succeeded so far as to give considerable mental uneasiness for a time to a rather prominent physician. There are cases on record where still more serious consequences have resulted; men have been convicted of crimes of which they were innocent on false testimony of hysteric women.

"While this special form of mental disorder is by far most frequent in the female sex, it is not unknown in males; of course, in these cases the symptoms are somewhat modified, but it occurs only in men with somewhat abnormal and feminine mental organizations. In some of these, sexual perversion is a notable symptom, and it seems probable that this hysteria is at the bottom of many cases of this abnormality.

"In male hysteric insanity we see many of the same tendencies to morbid emotionalism, eroticism, false accusations, the exaggerated suggestibility, certain kinds of delusive conceptions, occasional threats or apparent attempts at self-injury or suicide, refusal of food, etc., that we observe in the female, but active hysteric convulsive attacks are very rare, and the well marked hysteric physical stigmata are also uncommon. Male hysteric insane are more likely to be suicidal or homicidal than are the females.

"Something may be said in regard to traumatic hysteria, which sometimes amounts to a kind of insanity, showing itself in an exaggerated valuation of physical disabilities and a certain moral weakening that leads the individual to overact and sometimes simulate. There are probably sometimes actual hallucinations and certain delusive conceptions. These cases may be regarded as rare, though hysteria from this cause is common. They have chiefly a forensic importance."

The hysterical type of prisoner is the bete noire of the prison surgeon. He is irritable, quarrelsome, goes about seeking to provoke an argument, constantly complains that he is ill treated by the prison officials, that unfair tasks are assigned him, that the fellow prisoners steal his tools and delay his work.

He constantly makes demands for interviews with the disciplinary officer; he is rebellious at discipline. He finds the obedience to the prison's simplest rules a hard task. At other times he is extremely cheerful, vivacious, and his actions are liable to overstep the bounds of prison convention. This brief period of apparent improvement in conduct is usually followed by a train of hypochondriacal complaints.

This type of prisoner comes to the sick line every morning. One day he complains of precordial distress; the following day he confidentially tells the prison physicians that he has very frequent nocturnal emissions, that he is troubled with nightmare and insomnia. At the next morning's sick call he gives a new revelation concerning gastric disturbances with which he suffers. In a few days he becomes extremely depressed and melancholy. He imagines himself the victim of conspiracy by the officials of the institution. He becomes lachrymose and he relates his grievances to his fellow prisoners to create sympathy. Failing to do this he frequently pretends to commit suicide. Should this fail to arouse the sympathy which he morbidly craves, he frequently becomes maniacal, throws his food on the floor, breaks the dishes, tears his clothing and talks in an incoherent and senseless manner. After a few days, whether placed in the hospital or not, his mental condition returns to its normal state and in course of time another cycle of such behavior and conduct is again enacted.

The hysterical criminals constitute possibly four per cent of the insane cases in prisons among the male prisoners, and this percentage is much higher among the female delinquents.

Dr. Spaulding, of the Woman's Reformatory in Massachusetts, stated, in a recent report, that eleven per cent of the female offenders showed manifestations of hysteria.

It has been noted among female prisoners that maniacal hysterical outbreaks occur very frequently and more especially at the time of menstrual periods. The following stenogram is taken from Mrs. Mary Carpenter's "Female Life in Prison": "Miss G., I'm

going to break out tonight.' 'Oh, nonsense; you won't think of any such folly, I'm sure.' 'I'm sure I will.' 'What for?' 'Well, I've made up my mind, that's what for. I shall break out tonight. See if I don't.' 'Has anyone offended you or said anything?' 'N— no, but I must break out.' 'And then you will go to the dark cell.' 'I want to go to the "dark".' And the breaking out often occurs as promised; the glass shatters out of window frames; strips of sheets and blankets are passed through or left in a heap in the cell; the guards are sent for, and there is a scuffling and fighting and scratching and screaming that pandemonium might equal; nothing else."

PSYCHOPATHIC PERSONALITIES AND BORDERLINE STATES.

There is a group of psychopathic individuals whose mentalities lie in that ill-defined state where sanity shades imperceptibly into insanity, where the markings between responsibility and irresponsibility are hazy, indistinct and confused. Because of this lack of mental equipoise, they are very potential lunatics or criminals.

These persons constitute a very much greater portion of the defective delinquent class than do the criminals of the positive psychoses.

For purposes of description the individuals of this type have been variously designated as psychopaths, constitutional inferiors and sexual perverts, and they will be briefly described.

The psychopaths constitute a group of individuals who may be said to be "semi-insane or semi-responsible." The following is a description of the psychopath by Dr. Parker: "In the psychiatric sense he is neither flesh nor fowl, neither sane nor insane, and he is a dangerous individual at every stage. He is bright, responsive, reactive and in a varying degree adaptable for certain periods. He is antisocial either for brief periods or persistently.

There are individuals who display many eccentricities of character and conduct. But these characteristics seem to be no departure from the individual's usual manner of feeling, thinking, and acting, nor are they sufficient to warrant calling the individuals who possess them insane. Yet these characteristics in question hinder the efficient adjustment of the individual to his environment. It is noted that a positive insanity is a very frequent development in these cases. They have been graphically described by Regis as follows: "Their lives are one long contradiction between the apparent wealth of means and poverty of results."

Their mental twists, so to speak, make it impossible for them to live at ease in their environments. Their distorted mental perspectives lead them to magnify the wrongs they see in the social organism.

They are dreamers, reformers, propagandists and curbstone socialists; and should they come into conflict with the law, they assert that the wrong lies with society in its laws and not with themselves.

The psychopath is often the victim of obsessions and imperative ideas. While in the majority of cases they are limited to harmless results so far as society is concerned, they may, however, occasionally lead to the performance of criminal acts.

"It is not to be thought that crimes of obsessive origin present diagnostic difficulties from the medicolegal point of view. Before he obeys the criminal impulse, the patient is deeply grieved about it; he upbraids himself, and does his best to restrain himself. He is ready to suffer the most painful forms of treatment—isolation, preventive correction, etc. If, in spite of all efforts, he succumbs to the obsession (a very rare and almost impossible eventuality), he can show a hundred facts that testify to the morbid origin of the offense and prove its fatal determinism, excluding every possibility of criminal responsibility. As it is superfluous to prove, the ordinary inciting cause of a crime is absent. On the other hand, it is evident that there is a psychopathic cause which is capable of becoming a paradoxical incentive; the offense is committed because it has become an obsession, and it is an obsession because it is repugnant to the honest, gentle and sensitive character of the alleged criminal."

CONSTITUTIONAL INFERIORS.

The largest single group of criminals that I have studied may be classified under the term "constitutional inferiors." The term is self-explanatory. While the individual of this group is not feeble-minded in the strict sense of the term, he is below par either physically or mentally. He is unable to stand the strain imposed upon him by the ordinary conventions of society; without assistance he cannot occupy the place that he should in the social order. Indecision, inability, vacillation and dependency are his chief characteristics. He readily takes to every vice that comes across his path, he indulges in prostitution, falls an easy victim to the drug and drink habit. His mental operatives are slow or inaccurate; his reason and judgment are defective. The constitutional inferiors possess an un-

satisfied craving for continual and unusual excitement, and in their impetuous endeavors to secure it they live on the borderline of insanity and criminality, over which they are swept back and forth by the force of tempting circumstances in which they often find themselves. In them the call of the Wanderlust is particularly strong; they travel from place to place, and the railroad employees and detectives in particular can testify to this fact. With the coming of warm weather hundreds of them traverse the continent in search of contentment, which leads them a never-ending chase. Many of them are convicted of petty crimes and a very common one for them to commit is the breaking of box cars to secure food and small plunder.

The treatment to be attempted in this class is the removal of these physical conditions brought about by dissipation and venereal disease, removal from vicious and bad associates, re-education and tactful direction of their thoughts and activities into channels of usefulness. If it were possible to transform their restlessness and unproductive activity, and if employment could be secured that would in a measure afford them novelty and excitement, their rehabilitation might be expected if it were not for their neuropathic organizations.

There are to be found in this constitutionally inferior class of persons a group of individuals to whom the term pathological liar can be applied with a marked degree of descriptive accuracy. This tendency to excessive prevarication has its origin in the higher types of mental defect and especially in those cases where there is a marked degree of emotional instability and a lack of mental equilibrium.

These individuals are the gossips of the prison. They seem to take a particular delight in spreading unfounded, senseless rumors and falsehoods about the institution; they are sincerely hated and distrusted by the other prisoners. Very often they make confessions of crimes which they never committed merely to gain notoriety and the attention of the prison officials.

In one instance, there came under my notice one of these morbid liars who made a confession that he committed a murder. He was in reality not guilty at all, but on the strength of his confession he was convicted in court and sentenced to life imprisonment.

SEXUAL PERVERTS.

There are very many sexual perverts to be found outside of penal institutions and hospitals for the insane. We are only interested with

those sexual anomalies, so far as this article is concerned, that show a direct relationship to legal crimes which may be classified as rape, incest, sodomy and necrophilia. But it is to be understood that certain other inversions and perversions of the sexual instinct lead to various other crimes. Murder has often been the outcome of sadistic practices.

Not all expressions of homosexuality are to be regarded as evidences of insanity, yet it may be safely said that the majority of sexual perverts are psychopathic individuals.

Sexual perverts of the most disgusting types are found among the psychopaths.

Whether these anomalies of the sexual instinct are always congenial or not has not been settled, and it does seem that inverse and perverse sexual habits may be acquired early in life by the association with vicious and depraved individuals. The sexual perverts are at any rate an exceedingly dangerous and demoralizing class, which should be permanently isolated to prevent their mingling with others.

Sodomy is not an infrequent crime among prisoners. About one per cent of all admissions to this prison are for this perversion. A most constant and strict supervision is kept over the prisoners by the prison officials to prevent this practice, and in those prisons where more than one inmate is housed in a cell extreme caution must be exercised.

Approximately two per cent of all admissions to the Indiana State Prison are for incest. But it no doubt occasionally happens that some of the men convicted of incest are innocent, and that blackmail, hysteria and fraud play a part in such convictions.

During the last five years four and eight-tenths per cent of all the prisoners admitted to this institution were convicted of rape.

The average age of men convicted of rape admitted to the Indiana State Prison is forty-four years plus; ninety per cent of them showed disorders of the nervous system and an increase or decrease of the tendon reflexes and a general condition of arteriosclerosis; seventy-three per cent of them were married men in whom the habit of frequent intercourse was established; sixty per cent of the cases of statutory rape were committed by men over fifty years of age.

FEEBLE-MINDEDNESS.

The greatest causative mental factor of crime is feeble-minded-

ness. Several divisions of mental defect have been made, and while they are more or less arbitrary, they are very useful for the purposes of description.

The American Association for the Study of the Feeble-minded has formed the following definitions relating to the classes of mental defect:

First. Idiots; mental age below two years.

Second. Imbeciles; mental age from two to seven years.

Third. Morons; whose mental age exceeds that of imbeciles, ranging between seven and twelve years.

Fourth: Subnormal variety; whose mental capacity is slightly above the average custodial case.

All of these varieties are found in the Indiana State Prison with the exception of the idiot class.

As we are only concerned with the symptoms of feeble-mindedness that relate to crime, no other symptomatology will be described.

Brutality and cruelty seem to be universal symptoms of imbecility. The precocious cruelty of the feeble-minded which enables them to torture animals, cripple birds, to tear the wings and legs off of insects, to laugh at the pain of others, to inflict torture with delight, forms the basis when they are physically able for assault and battery, for homicidal attempts and murder.

The easy disintegration or cleavage of consciousness which occurs so often in the feeble-minded permits violent explosions of anger against those who interfere with their pleasure. Their wrath is shown by outbursts of fury and frenzied attacks; again it is exhibited by well calculated and cunning cruelty.

The feeble-minded, lacking in reason and judgment and devoid of all moral critique, commit all manner of sexual crimes without any feeling of restraint or shame. They masturbate openly and excessively; the imbecile father impregnates his own daughter; he may commit sodomy with his own son; or, the imbeciles may attempt intercourse with their mothers, and "sexual satisfaction with animals is frequently attempted. The great majority of cases of injury (sexual) to animals must be attributed to imbeciles." Many of the attempts to murder, and murder itself, committed by the mentally defective, are perpetrated when the person attacked resisted their erotic assaults.

Often they are cunning thieves; articles of small worth seem to have a great attraction for them; to satisfy their vanity, they often steal wearing apparel. They set fire to property to appease their desire for the excitement which attends conflagrations. Many of the pyromaniacs who are a constant source of worry to the fire insurance companies are feeble-minded persons.

"Higher imbeciles are predisposed to systematized delusions, and more particularly to communicated insanity. Imbeciles are the near neighbors of paranoiacs, and are apt to pay tribute to them by blindly professing their delusions on the occurrence of the slightest opportunity.

"When a paranoiac is a propagandist of mystical ideas, and reigns as a sovereign or high priest, it is the imbeciles who compose his court, and form the majority of his subjects (Jacoby). The contagion is favored by the affinity of tendencies in paranoiacs and imbeciles; every paranoiac is mildly imbecile, and every imbecile is at least a candidate for endemic paranoia if he lives in isolated and fanatical surroundings. . . . In epidemics of religious and political delusion, it is among imbeciles that spies and traitors are most easily found. Their want of critical power, their fickleness of character, and the servility that drives them to become the apostles and slaves of paranoiacs, whose ideas they do not understand, lead them also to surrender when intimidated by warnings, flattery and threats. Their intelligence is equally incapable either of originating a delusion or of spontaneously correcting a delusion; but it is accessible to the positive and negative suggestions of others, and does not appreciate how compromising it is to suddenly abandon a principle.

"In the moral point of view the lacunae are perhaps more marked than in the domain of the intellect, and if these patients are capable of showing to varying extent sentiments and affections of a low order, they are only the least elevated ones, and the lower instincts that dominate them. The majority are vain, gluttonous, cowardly, credulous, idle, irascible, inclined to venereal and alcoholic excesses and to acts of violence (Marce); nearly all are given to onanism, and some to unnatural crimes. At certain times they may be seized more or less suddenly with melancholic or maniacal attacks, during which they are particularly liable to commit acts of obscenity, or even arson, robbery, suicide, or homicide. When these attacks, which

very often assume in them a periodical or circular character, occur many times, the patients soon fall into a condition of dementia."

Alcohol plays a very important role as an element for the production of crime in the feeble-minded. It serves to intensify the defect already existing, it weakens the already enfeebled volitional powers; it is influential in firing misguided, wild and erratic emotions. It disorients previously inefficient and irrational judgments. In fact, it raises to the nth power all the potential and latent elements for criminality that lie dormant in the constitution of the feeble-minded.

FEEBLE-MINDED PRISONERS.

I classed twenty-three per cent of the criminals as feeble-minded. In the employment of this term I have endeavored to limit its application to those persons who as a group possess "all degrees of mental defect due to arrested or imperfect mental development as a result of which the person so affected is incapable of competing on equal terms with his normal fellows, or of managing himself or his affairs with ordinary prudence." This, in the language of the American Association for the Study of the Feeble-minded, is necessary for the diagnosis of feeble-mindedness.

Various estimates have been made by different physicians and psychologists as to the number of feeble-minded persons in penal and reformatory institutions. This number has varied from twenty to sixty per cent, and these differences can be easily understood when we consider the various natures of the institutions giving this data and the general broadness or narrowness of the psychopathological examination employed in such determinations.

Dr. Walter Fernald has stated, "At least twenty-five per cent of the inmates of our penal institutions are mentally defective and belong either to the feeble-minded or to the defective delinquent class.

"At that rate we should have twenty thousand such individuals in adult prisons, and six thousand in juvenile reformatories, making a total of twenty-six thousand defective delinquents in actual custody, not to mention those who have never been arrested and the large number who have been discharged or paroled from institutions and are now at large. There are doubtless as many defective delinquents at large as there are in custody."

The following tables give approximately the percentage of feeble-minded persons to be found in the following institutions:

New York State Reformatory, Elmira, about 37 per cent.

New Jersey State Reformatory, Rahway, about 33 per cent.

New York Reformatory for Women, Bedford, about 37 per cent.

Massachusetts Industrial School for Girls, Lancaster, about 50 per cent.

Maryland Industrial School for Girls, Baltimore, about 60 per cent.

New Jersey State Home for Girls, Trenton, about 33 per cent.

Illinois State School for Boys, St. Charles, about 20 per cent.

The reports of psychopathic laboratories which operate in conjunction with our courts are not altogether reliable for the reason of the haste in which these examinations have to be given. And second, the states of apprehension, anxiety and fear which often develop in prisoners preceding trials do not offer the best opportunities for accuracy and precision in applying mental tests.

The contents of this paper are but an abridged and synoptical outline of the work that has been done in our laboratory of criminology. We have had no elaborate equipment or extensive material foundation. Neither do we have the services of a trained psychologist. But we have by careful work gradually accumulated invaluable records which have led and are leading to better classification of prisoners.

"The psychopathic laboratory not only directs thinking, and by classifying, opens the way for the economical training of prisoners; but, by individually adapted teaching, fortifies the man where he is weakest. The drug and alcohol addict is taught how to meet temptation, how to avoid it; the epileptic is assisted in his selection of an occupation. The sex offender is appropriately taught, and the psychopath is shown how to recognize his peculiar weakness, and how to train himself to withstand or avoid temptation. These essential, personal, intimate teachings, and many others, can be made available to the needy prisoner only as they are ascertained and given him in the psychopathic clinic."

The prison physician, if he be a medico-psychologist, and he should be, can render a great service to humanity by applying, as Dr. Fernald says, "his skilled energy to the emancipation of individual

prisoners from the misconceptions, unworthy ambitions, mental conflicts, incipient psychoses, damaging habits, warped disposition, or inimical prejudice, etc., etc., with which they contend. The relief of individuals from these and many other remedial mental twists is peculiarly the work of the medical man. When others offer to assist in this work their efforts should be welcomed and directed and utilized in this wide and fertile field. The workers are all too few at best."

In conclusion it may be said that a psychopathic laboratory in a penal institution is absolutely necessary. It is just as essential as any other department. It is another milestone in the progress of criminological science.

REPORT OF PSYCHOLOGICAL TESTS OF ORPHAN CHILDREN

KATE GORDON, PH. D.

Psychologist, Children's Department, California State Board of Control

Between June and December of the present year, 1918, mental tests were given to 335 dependent children living in various orphanages in the state of California. All the examinations here reported were made and scored by me personally.

Tests used. There are available for use in psychological examinations several "intelligence scales", or systematized groups of mental tests. The Binet-Simon tests, as revised by Goddard in 1911, are widely used. The Yerkes-Bridges Point-Scale is adopted by many workers. The Stanford Revision of the Binet-Simon scale is deservedly popular. And, among still others, the Pintner-Paterson Scale of Performance Tests is now available. Each of these scales is good. Any one of them would be an excellent instrument for our purpose. After testing about 130 institution children by two of these scales, namely, the Goddard 1911 and the Stanford Revision, I finally chose the latter, first because of the greater variety of tests which it offers for children with a mental age of 12 years or over, and second because the tests for very young children are probably more accurately placed in year levels. In addition to these two scales, certain performance tests were also given to a number of the children. These are the Knox Cube imitation test, which will be mentioned below, and the Woodworth Wells substitution test, the results of which will be given in a later report.

Intelligence quotients. The term "intelligence quotient" is coming into quite general use as a convenient means of designating a child's mental status. To obtain this quotient the mental age, as measured by tests, is divided by the life-age, i. e., the actual number of years lived. Thus if a child is 10 years old and can do exactly as well as the average child of 10 years, his intelligence quotient is 10 divided by 10 or 1.00. Written without the decimal this may be called 100 or average brightness. If the child of 10 can pass tests which it takes an average child of 11 years to pass then his quotient is 11 divided by 10 or 1.10 (110) and he is above the average in brightness. But if the child of 10 can pass only such tests as an average 9-year-

old can pass then his quotient is 9 divided by 10 or .90, and he is below average.

It is also possible,—indeed customary—to express a child's mental status by saying that he is so many years retarded or so many years advanced for his age. But such statements take no account of the point that to be, say, 3 years retarded at 6 years of age is in all probability a more serious condition than to be 3 years retarded at 16 years of age. Everything that we know concerning the growth of children indicates that the rate of development is very fast during the earliest years of life, and that, with some fluctuations, it gradually declines. After the age of 15 or 16 we can no longer expect any very marked improvement in native abilities,—the mental changes beyond that period being chiefly due to training and experience. The intelligence quotient, being a ratio between mental age and life age, gives to the points just mentioned a certain amount of recognition and weight.

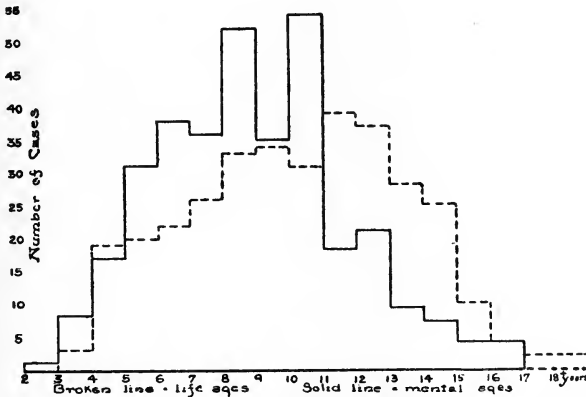


Fig. 1. Mental Ages and Life Ages of 335 Dependent Children.

Results of tests. Fig. 1 shows in graphic form the distribution, with respect to life age and mental age of 335 children. The solid line represents mental ages as measured by the Stanford scale, (13 children are included in this graph who were tested by the Goddard scale only) the broken line represents life ages. The average life age for this group is 10.2 years, and the average mental age is 8.8 years. Fig. 2 shows the distribution of the intelligence quotients for the same group. These range from .29 to 1.37. The lowest is that of an

imbecile girl of 16 years having a mental age of 4 years 8 months, and the highest is that of a girl 7 years 6 months old having a mental age of 10 years 3 months. The average intelligence quotient for the whole number is .89. The figures include 110 boys and 225 girls. Whether this group of 335 is typical of the children in California orphanages it is impossible to tell, but I think it likely that this number averages slightly lower than the whole group would do, because in some institutions where only a partial survey was made a number of cases were sent in for examination which were supposed to be below normal. However, out of this total we are in a position to compare 3 unselected groups of children as follows:

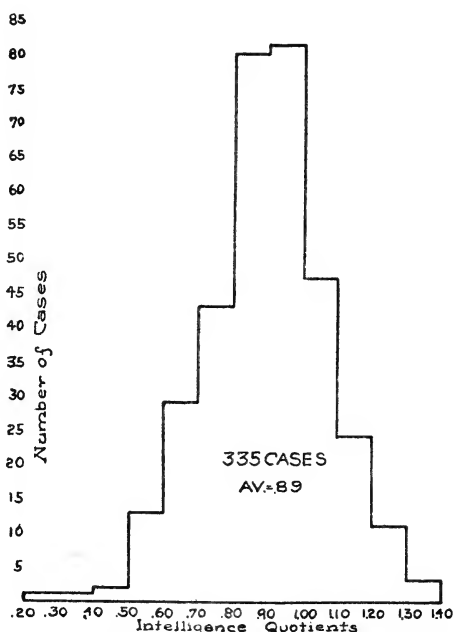


Fig. 2. Intelligence Quotients of 335 Dependent Children.

In the X Home 50 children were examined, this being about two thirds of the total number in the institution. The work here was stopped by the influenza epidemic, but there is every reason to believe that this 50 affords a true picture of the whole. These intelligence quotients range from .29 to 1.04, the average being .77. These are all girls, and most of them are of a mixed Spanish-Mexican descent. Their average life age is 11.2 years.

In the Y Home 80 children were examined, this being practically the whole population of the orphanage. The quotients range from 53 to 137 with an average of .95. The average life age is 8.2 There are 45 boys and 35 girls in this home and they represent at least 12 different nationalities.

In the Z Home there were 89 children and all were examined. The average life age is 10.6 years. The quotients range from 63 to 131 and the average is 1.00. There are here 43 boys and 46 girls, and all are of one race,—the Hebrew. Fig. 3 gives the distributions of quotients for these three groups.

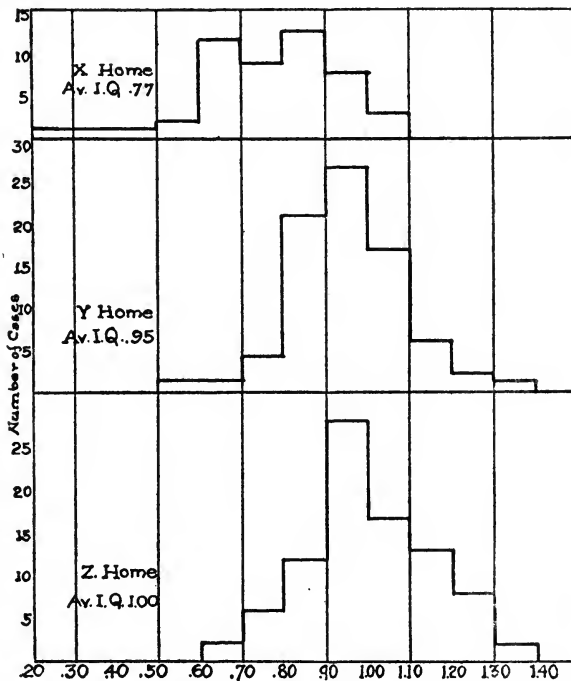


Fig. 3. Intelligence Quotients of Children in Three California Orphanages.

The foregoing results show that there is a wide range of mental ability among these dependent children, and a wide range also among those in the same institutions. Furthermore it should be clear from these figures that the conditions in one institution are very different

from those which obtain in another, and that each institution should be studied individually.

It may be in place here to state briefly the meaning of these intelligence quotients. Those children whose quotients lie between 90 and 110 may usually be regarded as having average-normal mental ability. Terman has estimated¹ that about 60 percent of school children fall within these limits. A child whose quotient is below .90 may still be normal but he is likely to prove dull. One whose quotient lies below 80 will almost surely be found retarded in school, provided the school itself is maintaining a proper standard. Such children may often be classified as borderline cases between normality and feeble-mindedness. Children grading below .70 or even .75 are generally feeble-minded.

Turning back to Fig. 3 the question may arise whether the low average of the X Home is due to the influence of sex or of race, these children being all girls and for the most part of Mexican-Spanish origin. Some light can be thrown on this matter by comparisons between the boys and girls of the other institutions. In the Y Home there are 45 boys. Their intelligence quotients range from .56 to 1.20, with an average of 93.3 and a standard deviation² of 11. There are 35 girls in this home, and their quotients range from .68 to 1.37 with an average of .97 and a standard deviation of 15. In the Z Home there are 43 boys, whose quotients range from .71 to 1.30 with an average of 1.00, and an S.D. of 14. There are 46 girls, whose quotients range from .63 to 1.31 with an average of 1.00 and an S.D. of 14. These figures suggest that if there is any difference between the boys and girls, from the point of view of the tests, this difference is small and it is in favor of the girls. We must, however, recognize the fact that during the period of growth girls are always slightly nearer their maturity than are boys of the same age, and this would tend to give an advantage to the girls. It seems fairly evident, on the other hand, that our figures indicate a racial distinction which is significant. The averages of the X Home and the Z Home present a striking contrast. It is interesting to note also,

1. "The Measurement of Intelligence." Houghton Mifflin, 1916.

2. The standard deviation is a number which expresses the closeness with which individuals are grouped around the average.

that in the Y Home where the races are together, there are three boys who have part Mexican blood and all are below average, whereas there are eight Jewish children of whom six have quotients above 1.00, one of them being a 7-year-old girl whose quotient is the highest of the 335 children tested.

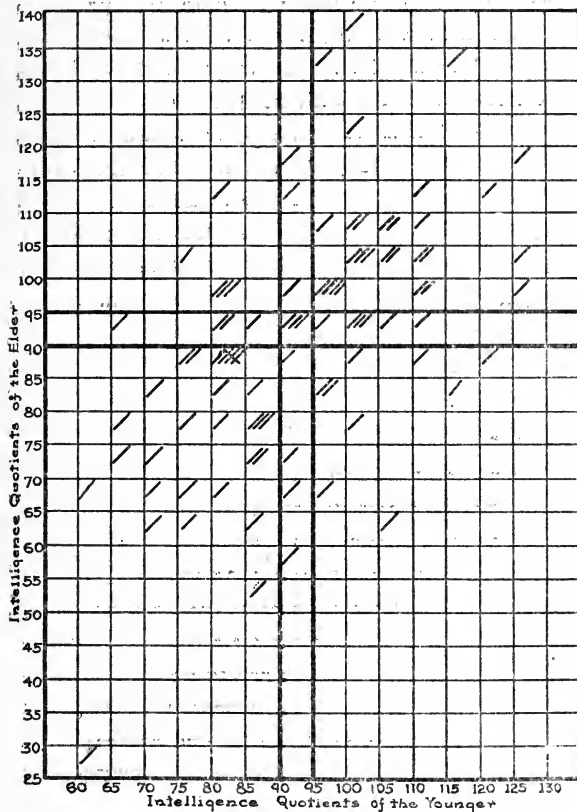


Fig. 4. Intelligence Quotients of 91 Pairs of Siblings.

Mental ability of siblings. It is a matter of some practical importance in dealing with dependent children to know something of the extent to which mental characteristics may be expected to recur in the same family. I have therefore made a comparison of the intelligence quotients of all the brothers and sisters whom I examined. By a pair of siblings is meant either two brothers or two sisters or

a brother and sister. Where there were four children in a family the first was paired with the second, and the third with the fourth. Where there were three in a family the youngest child was omitted. In one group were put all of the elder children of the various pairs, and in the other group all of the younger children of the pairs. Fig. 4 is a scatter diagram illustrating the relationships between pairs. Each mark in the diagram represents one family pair. Inspection of the diagram shows that the members of the same family tend to have similar rank. The marks in the lower left-hand quadrant mean that dull children tend to have dull brothers or sisters, and the marks in the upper right-hand quadrant mean that bright children tend to have bright brothers or sisters. The marks in the other two quadrants mean that there are some exceptions to this rule. The coefficient of correlation, computed by the Pearson formula, equals .53. When we remember that if brothers and sisters differed from one another as much as the average child differs from his neighbor this

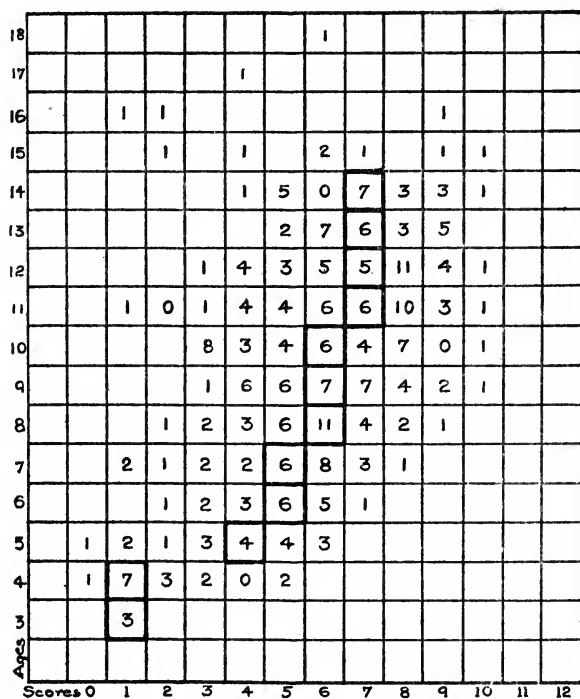


Fig. 5. Distribution of 300 Scores in Knox Cube Imitation Test.

coefficient would be .00, then the figure .53 appears as a fairly high degree of correspondence.

Results of Knox Cube Imitation test. This test, which was devised for use at Ellis Island, consists of several series of tapping movements which are to be watched and imitated. I gave the series, as described by Pintner and Paterson³ to 300 children. Fig. 5 shows the number of children at each age who made each of the possible scores. The highest score possible in this test is 12. The position of the medians is marked by the heavy lined squares. This test has the advantage of being uninfluenced by the amount of schooling a child has had, and of being independent of the use of language. It can be given in about six minutes. Some theoretical interest may attach to the correlations between this test and the Stanford intelligence quotients. I have computed them for the different ages given in Table I, though the number of cases at each age is small.

Table I. Correlations between Knox Test and Stanford I.Q.S.

Age	No. of Cases	Pearson
15 and over	12	----
14	20	.61
13	23	.33
12	34	.62
11	35	.67
10	33	.53
9	34	.48
8	30	.48
7	25	.88
6	18	.06
5	18	.29
4	15	.19
3	3	----

Some uses which tests may serve. These examinations are, first of all a means of becoming better acquainted with individual children. They are not merely a method of classifying, for they are often the occasion for glimpses into the range and quality of the child's ideas. Sometimes these glimpses are quaint and amusing, as with the little girl who said that the difference between a president and a king is that the king eats more, and wears a gold suit, or with the little boy who defined a "rule" as "something to spank with." Sometimes they are pathetic, as when a child said that a "mother" is

3. "A Scale of Performance Tests." Appleton, 1917.

"one who goes away". And again they cast a sinister light, as with the 6-year-old girl who said to me that a "soldier" meant "to stay with a woman". One or two instances will suffice to show how tests may serve in giving pedagogical advice. A boy of 11 was brought by his teacher to be examined. He had a refined face, a well-modulated voice and a maturity of manner which were very misleading. At the beginning of the examination his attention was hard to get and impossible to hold. His replies were irrelevant and strange, and he seemed wilful and unmanageable. At last I asked him the questions which a child of four can answer and his face lighted up with understanding. For the first time he knew what was wanted, and from that moment he was attentive and interested. He felt at home in that mental level and responded exactly as a child of four would do. His intelligence quotient was .36. This boy would be happier and the school better off if he were put into other surroundings. Another boy, this one a 9-year-old, was reported as doing unsatisfactory school work, though he was not behind his grade. His quotient proved to 1.19. He is a boy of superior intelligence but lazy. He should be pushed in school.

Another use of tests is to make possible a more accurate comparison of children with one another, or of one group with another. In one institution it was suggested to me that mental tests were superfluous since the superintendent had known the children intimately for years and would be better able to judge of their ability than any psychologist would be after an hour's testing. In some homes and with some superintendents this may be true, but even if it is true, who is to say how the children of one home compare with those of another home? I have found children with intelligence quotients of .80 to .85 regarded as "right up to the average" in one institution, and children with the same quotients regarded as feeble-minded in another institution. In both instances the superintendents had been judging children for many years. Psychological tests are not infallible, but they are uniform and are not based on personal opinion.

Those who are responsible for the placing of children, whether in private homes, or at suitable work, or in institutions are entitled to have at their disposal information upon the child's mental status. Hence, in order to have the results of our tests available, a card

catalogue has been started in the central office of the Children's Department. The children are listed alphabetically and the cards are provided with colored signals so that one may readily locate the superior, the average, the borderline and the feeble-minded. A complete index is contemplated for those children who are wards of the state.

Of all the questions which come to mind as one visits these orphanages there are two which are most persistent. First, what is to be done with the defective girl when she reaches maturity? One or two cases will illustrate the danger which any one of these girls may have to face. The first is a girl of 17 years with very sweet, modest demeanor. She is docile and willing to work and does housework well. Her intelligence quotient is .66. She left the orphanage a year or so ago to go to work. She has now had one illegitimate child,—her mother is said to have had eleven. Another young woman whom I examined who was plausible and vivacious in manner had a quotient of .47. After leaving the institution she was violated by her own father and now has a child by him which is markedly defective. These two girls are not immoral, they are simply victims who cannot protect themselves.

The other question of special importance is that of the highly gifted child. Of the 335 dependent children tested more than 10 per cent have intelligence quotients above 1.10 and among them are some who give promise of unusual attainments. In the ordinary course of events these children must go out to work at the age of 15 or 16, and the possibility of a higher education for them becomes very remote. To provide for these children the best education which they can profit by would seem to be not only good policy, but social service of a high order.

In closing I wish to express my appreciation of the courteous interest and co-operation which have been shown by those in charge of the various orphanages where the tests were made.

COMMUNICATION AND DISCUSSION

To the Editor: I read with much interest in your July issue the very significant article by Dr. Terman on "Expert Testimony in the case of Alberto Flores". The facts set forth agree so closely with several similar cases in which I have been concerned, and Dr. Terman developed his point so convincingly, that I was moved to write you a letter of congratulation. Press of work, however, drove the matter from my mind until I noted in your last number a communication which attempted to excuse the expert who testified for the state. I do not wish to precipitate a discussion in your excellent journal on the relative value of testimony given in such cases by psychologist or physician, and you may use your own judgment about publishing this letter; however, I thought you might be interested to have the opinion of one who has had considerable training and experience in the psychology of intelligence testing and who is also trained as a physician and psychiatrist and has had occasion frequently to give expert testimony in the case of insane as well as feeble-minded offenders. I am frank to say that as a physician I know of no reliable method of determining the intelligence level of an individual except by the proper application of **standardized** intelligence tests. It is therefore obvious that if a physician is not trained in the technique of psychological testing he is but little better fitted to form an opinion as to the mental level of an individual than is any well educated layman unless the case of mental defect be one associated with glandular anomaly, brain hemorrhage or certain nervous or mental diseases in which deterioration of intelligence is a well known feature of the disease picture. I recall a case of some importance where the outcome hinged upon the question of the exact mental level of a high grade moron. I was on the witness stand for the defense for several hours and described in detail the methods by which I had arrived at my conclusions; and I stressed the point that the application of standard tests of intelligence implied a knowledge of certain essential technique. The physician who testified for the prosecution was known as "specialist on mental diseases" and was unquestionably a well trained and experienced man, excepting that he was not familiar with intelligence tests or with the high-grade feeble-minded. He, like the physician in the Flores case, had given considerable time to "making observations and tests, in his way", on the case. During cross-examination the lawyer, after many attempts to get him to describe just how his haphazard tests demonstrated that the offender was of normal intelligence, said: "Doctor, did you ever have a course in modern physiological psychology or have you had any laboratory training in intelligence testing?" With evident disgust the doctor replied, "No; I am not a psychologist, I am a physician." Your correspondent in the September issue doubtless is right when he states

that the doctor who testified in behalf of the people in the Flores case made his tests "for the purpose of determining in his mind whether or not Flores was an **insane person**, and not for the purpose of discovering whether he was subnormal". It is exactly this failure to appreciate that the case may be one of feeble-mindedness and not of insanity, and that under such circumstances only standard psychological tests will fix the degree of intelligence, that renders the testimony of physicians untrained in psychology so unsatisfactory in such cases.

The modern, well trained psychiatrist is familiar with psychometric methods and is trained in the technique of psychological testing; it is only such physicians who are adequately equipped to go on the witness stand in a case where the question of intelligence levels is involved. When called as an expert in the case of a supposed feeble-minded offender, or when satisfied that a person accused of a serious crime is not **insane**, then the physician-witness untrained in psychology should frankly request as an associate in the case either a physician trained in psychometric methods or a psychologist who is familiar with intelligence testing. At the present time there are very few physicians who are trained in modern psychology. I see a great many nervous and mental cases in consultation with a number of different physicians, and seldom do I find in the case of high-grade feeble-mindedness that a diagnosis has been made by the attending physician. This is no reflection on the doctor's training; and the best trained physicians invariably express surprise and keen interest, and quickly perceive that the standardized psychological tests correspond to many similar clinical tests that have been developed recently and each of which has its own definite technique. I received my medical training at one of the large universities where over six hundred nervous and mental patients were available for study in the courses in psychiatry; and yet, in the entire course, feeble-mindedness, as such, was not demonstrated, nor were there any references made to intelligence tests. This is no reflection on the curriculum of the medical school at that time for intelligence tests were just then being developed in this country; but I cite this to show that the training of a physician does not necessarily fit him to give reliable testimony in all cases of feeble-mindedness unless his training has been supplemented by institutional experience and definite training in a modern psychological laboratory.

Sincerely yours,

Albany, N. Y.
Nov. 13, 1918.

CLINTON P. McCORD, M. D.,
Health Director of Schools.

PERIODICAL LITERATURE

BAGGOTT, ROLAND W.: THE RELATION OF THE HUMANE SOCIETY TO THE JUVENILE COURT. Humane societies have been instrumental in placing on the statute books of nearly every state laws which protect children from cruelty, prevent them from becoming paupers, and cover nearly every form of conceivable neglect and abuse. The official existence of the juvenile court is largely due to the effort and activity of these societies. The true function of the humane society is to vouchsafe the right of justice for the helpless, and it should present its case to the courts in such a way as to protect the innocent, punish the guilty, and rescue the abused. The juvenile court and humane society together can handle an entire family situation without a multiplicity of cases, and each keeping in touch with the aims and purposes of the other should result in greater service to humanity.—National Humane Review, VI-12, Dec. 1918. pp. 226, 227. W.W.C.

BURLEIGH, EDITH N.: SOME PRINCIPLES OF PAROLE LAWS FOR GIRLS. Experience has shown us that the parole of girls may differ materially from the principles applicable to the parole of boys and adults. We are considering girls who have been committed to institutions by the court because of having broken certain laws. The institution is only the first step along the road to the complete rehabilitation of the girl. Unrestricted return of the girl to the community is manifestly too dangerous, so a second step must be provided. A system of parole inaugurated under the same board of trustees but as an independent outside department from the institution would be the most effective means of solving the problem. Parole should offer the girl a chance to put behind her all the signs of her delinquency—court, probation, institution—the strongest argument against the co-ordination of probation and parole. It is fundamentally bad for the girl to make the reformatory institution a home center. It should be a background for future attainment. A home in which to place the girl should be carefully selected to fit her special needs. In every instance the girl's temperament and capacities must be considered. This individual treatment can only be secured by **oversight** over every girl, the second working principle. This oversight also means the **protection** of the girl—the third working principle. **Education** or **re-education** is the fourth working principle. The girl's church connections may be a great influence in her rehabilitation. The establishment of the habit of thrift is another source of education. The fifth principle is closely linked to all others and is the case of the girl's **health**. No thoughtful prognosis of the girl's future can be made without a careful observation of her mental development and a study of her home and family.—Journal of Criminal Law and Criminology, IX-3 Nov. 1918. pp. 395-403. M.S.C.

CARTER HENRY: ALCOHOL AND SOCIAL RECONSTRUCTION.

The regulation of liquor traffic during the period of the war has resulted in a changed attitude concerning the use of alcohol on the part of the general public in England. However the war-time "achievement of comparative sobriety" will not continue automatically when restrictions are removed after the termination of the war. As long as the sale of alcoholic beverages is sanctioned by the State there should be a control particularly in regard to (a) the places of sale; (b) the times of sale; (c) modes of sale; and (d) the alcoholic strength of the beverage sold. Restrictions along these lines during the past three years have prepared a large proportion of the people for favorable consideration of legislation which will prevent a return to the pre-war standard of intemperance.—*British Journal of Inebriety* XVI-2, Oct. 1918. pp. 29-42. W.W.C.

DILLER, THEODORE: A CASE OF CEREBRAL EXHAUSTION MISTAKEN FOR ONE OF PARESIS. Attention has been previously called by Dr. J. Ramsey Hunt to army cases exhibiting symptoms resembling paresis which were found to be cases of exhaustion. The case here presented is that of a business man of 30. Was brought to the clinic because of spells of fatigue and forgetfulness. Would often repeat himself within a few minutes. Showed marked nervousness and inferior coordination in handwriting. Looked tired, weary, stupid, and heavy; face lacked expression; marked facial tremor; articulation slurring, especially in test phrases; writing required much labor. Was taken to the hospital with the expectation that syphilis would be evidenced. Examination results, however, were entirely negative for blood and spinal fluid. Further observation, in the light of Hunt's data, revealed that the state was one of cerebral exhaustion. In five weeks the patient had improved considerably, defects of articulation, handwriting, etc. rapidly disappearing. It developed that previous to the diagnosis the patient had been working from twelve to fourteen hours per day, often to the point of extreme fatigue.—*Journal of Mental and Nervous Disease*, XLVIII-5, Nov. 1918. pp. 356-358. J.H.W.

HODDER, JESSIE D.: THE NEXT STEP IN THE TREATMENT OF GIRL AND WOMEN OFFENDERS. At the present time reformatories are not meeting the needs of the women sentenced to them by the court. The women sentenced have but one common denominator—crime. Women criminals are divided into three groups: 1. Those who may safely be returned to the community. 2. Those who need permanent custodial care. 3. Those about whom prognosis is doubtful. The 5,310 women criminals of Massachusetts in 1915 divide into three groups, 20.8 per cent normal, 16 per cent feeble-minded, 63.2 per cent subnormal or neuro-psychiatric. With these figures it is evident that a "reformatory" as we now know it cannot meet the needs of these women. The first group could be readily handled on probation. The second group would require a colony by themselves. They should not be called criminals and they are not reformable in the reformatory institutions of today. The third group is more of a problem. The psychopathic or epileptic woman is a nervous cripple; her struggles for social adjustment only

plunge her deeper into behavior complexes. Reformation does not mean, keep that prisoner safe from doing harm to me, but rather, make that prisoner over so that she may join me safely in the community. The next step then, is the correctional treatment of girl and women offenders in a new kind of reformatory, one that shall meet the needs of the individual person and focus upon the physical problems involved, but especially upon the psychiatric problems which are the predominating factors in the delinquent careers of these women.—*Mental Hygiene*, II July 1918. pp. 443-447. M. S. C.

MEAD, HELEN M.: AN EXPERIMENT IN AFTER CARE WORK. In May 1917, Boston outlined a plan to evaluate the work of a visiting teacher in connection with special classes, the data for after care study being arranged upon a plan formulated by Dr. Walter E. Fernald. 1. To make a survey of positions available and suitable for mentally defective children. 2. To help the children obtain positions. 3. To explain to employers the limitations of these children. 4. To protect them from moral and economic exploitation, to safeguard from careers of vice and crime, to investigate court cases and aid probation officers. 5. To advise parents concerning measures necessary for the children's welfare. 6. To gather data on after careers. Occupations for 14 boys include messenger service, factory work, delivery driving, and enlistment in the navy. The wages ranged from \$5 to \$7 weekly. Thirteen boys lost their positions through inefficiency, wanderlust, and general irresponsibility. One boy proved steady and dependable. Only five girls are listed,—three in factories, one in a hotel, one at home,—wages ranging from \$3 to \$7.50 weekly. Only one girl proved successful, the others losing positions through inefficiency. Various case studies more in detail show records of employment varying from nine days to six months service. Maladjustment to conditions of employment and lack of supervision is more notable in the case of the girls. Both boys and girls should have intensive training after leaving the special class. Employers must understand the problematical nature of employing mental defectives. Parents and homes should be supervised that the community may better control this problem.—*Ungraded*, III-8. May 1918. pp. 176-183. C.E.W.

RUBINOW, I. M.: DEPENDENCY INDEX OF NEW YORK CITY, 1914-1917. With the purpose of constructing an index which would measure fluctuations of dependency, the Bureau of Social Statistics of the Department of Public Charities, New York City, collected statistical material in reference to the following phenomena of social life. (1) general family relief or case (3) operations of the municipal lodging house; (4) number of free burials; (5) commitment of children to institutions; (6) payment to private hospitals for dependent patients; (7) amount of work performed by dispensaries; and (8) number of small loans. Indices showing the monthly fluctuations of each item were computed for the period 1914-1917. The particular value of the index will be its ability to reflect changes in general social conditions, thus eliminating hysterical exaggeration of situations. An effective and rapid means of measuring fluctuations of need should result in directing constructive social effort into higher efficiency and greater economy.—*American Economic Review*, VIII-4, Dec. 1918. pp. 713-740. W.W.C.

PUBLICATIONS RECEIVED

Averill, Lawrence Augustus. School Hygiene and Training for Citizenship. Reprinted from *The American Journal of School Hygiene*, Vol. II, No. 3. Sept. 1918. pp. 101-114.

A pamphlet showing the necessity of proper training in hygienic living for grade school children, and pointing out many fallacies in the present methods of instruction. The end of hygiene training is not anatomical knowledge but dependable health habits. Any instruction beyond the hygiene of an organ,—plus just enough anatomy to render this knowledge intelligible,—has no place in the public schools. Emphasis should be placed upon health rather than upon disease. Copious and appealing illustrations should be supplied, and the subject matter should be very concrete and closely related to the every day life of the child. A suggested course of study in hygiene is set forth, with excellent outlines of work suitable to each year.

California. Commission of Immigration and Housing. Immigration Leaflets Nos. 1 and 2. 525 Market St., San Francisco, Calif. pp. 3, 4.

The results of an investigation made in Los Angeles indicate that "great sums of money are spent in dealing with the results of ignorance, and that small provision is made for removing that ignorance by teaching our language and our laws, that ignorance of our language is at the bottom of much abuse, exploitation, unemployment, and hardship. A graphic comparison shows the following relative distribution of funds: crime, 47.8 per cent; sickness, 25.2 per cent; poverty, 16.4 per cent; unemployment, 7.5 per cent; education, 2.9 per cent.

Gesell, Arnold. Feeble-minded Children in the Country Home Schools of Connecticut. State Board of Education. Hartford, Conn. June 15, 1918. p. 11.

A study of feeble-mindedness in Connecticut with special reference to problems incident to the lack of a centralized state agency for dealing with public charges. Suggested lines of improvement are (1) psychological work among dependent children, (2) special attention to exceptional children, (3) special classes for feeble-minded children, and (4) broader education along vocational lines.

Hartley, C. Gasquoine (Mrs. Walter M. Gallichan). Motherhood. Pp. 402, price \$2.50. Dodd, Mead and Co., 443 Fourth Avenue, New York City.

The war has brought about many vast and divergent changes in the position of woman, and it is of these that Mrs. Gallichan treats in her book,, writing from an English point of view. She remarks on the vast number of women who have been forced into industry and have thus become economically independent, but she believes that the feminist movement has been practically destroyed, women having come to realize that motherhood is

above all else their essential duty toward civilization and world reconstruction. She reviews in detail the evolution of parental instinct, and devotes the larger part of her book to a discussion of how the home may be strengthened and motherhood conserved. She discusses the usual questions of sexual education, divorce, illegitimacy, etc., and while believing that life-long monogamy is the ideal for the normal individual, Mrs. Gallichan feels that allowance should be made for certain abnormal individuals, for whom freer and more temporary unions should be legalized.

Kohs, Samuel C. The Reed I. Q. Slide Rule. Reed College, Portland, Oregon. 1918. Price 35 cents.

A valuable and interesting device for the calculation of intelligence quotients. The apparatus consists of a movable cardboard disk attached to a heavier cardboard. By adjusting the two, the age and mental age may be placed in such position that the I.Q. will be instantly indicated. A celluloid strip attached to the card facilitates the measurement.

Lakeside Hospital. Fifty-first Annual Report. Cleveland, O. 1917. pp. 119.

This report is very commendable from every standpoint but being principally statistical in nature, it is of rather limited interest. The vast amount of work done by the hospital is very creditably shown in concise form.

Murphy, J. Prentice. The Foster Care of Neglected and Dependent Children. Reprinted from the Annals of the American Academy of Political and Social Science. Publication No. 1198. Philadelphia, Pa. May, 1918. Pp. 14.

This article contains a brief discussion of the value of case work methods as applied to the foster care of neglected and dependent children. Case work with children means knowing them and the conditions which affect their welfare. "Every children's organization which expects to do an effective, helpful service to the children and to the community which it reaches, must be provided with workers who are competent to understand the social problems which the children present, to get their right relationship, and then to apply the most effective social treatment." The writer insists that the whole question of child care is capable of scientific interpretation and unsupported opinions must give way to statements based on facts.

National Committee on Prisons and Prison Labor. The Use of Prison Labor on U. S. Government Work. Washington, D. C., 1918. Pp. 31.

By an executive order of President Wilson of Sept. 14, 1918, purchasing agents of war supplies for the government were empowered to place orders with the heads of penal institutions willing to undertake the production and delivery of such supplies. This pamphlet quotes in full the official communications regarding the matter and a type form of contract between a federal agent and a prison official is furnished.

New York State Hospital Commission. Statistical Guide. Fourth Edition. Utica, New York. 1918. Pp. 56.

This manual was prepared for the purpose of promoting uniformity in the use of terms by the Commission and by psychiatrists and the medical

profession generally in reporting statistical information concerning mental diseases. A classification of mental diseases, as adopted by the American Medico-Psychological Association and by the New York State Hospital Commission in 1917, is given and followed by definitions and explanatory notes. It also contains standardized and defined lists of items such as nativities, races, occupations, temperamental conditions, causes of death, etc., which are usually recorded on the statistical forms of the Commission. A careful study and observation of the definitions, terms and suggestions offered in this pamphlet should result in greater uniformity in the use of psycho-pathological and medical terms.

New York State Probation Commission. *Methods of Supervising Persons on Probation.* State Probation Commission, Albany, New York. 1918. Pp. 94.

This difficult problem and the methods used by the Commission in handling it are described in detail. The methods in use were carefully studied, persons who had served probation interviewed in order to get their opinion of the various methods of supervision, and information from other states was collected. Type cases are quoted freely to illustrate points brought forward.

Presier, Samuel A. and Davenport, Charles B. *Multiple Neurofibromatosis (Von Recklinghausen's Disease) and its Inheritance: with Description of a Case.* Carnegie Institution of Washington. Eugenics Record Office Bulletin No. 19, Cold Spring Harbor, Long Island, New York. October, 1918.

The writers present in this article a medical disease which also involves a social problem. Multiple neurofibromatosis is described in medical and physiological terms, giving the case symptoms and associated phenomena, such as mental inferiority and delayed sexual development. The social aspects are approached from the eugenic point of view; that the disease has hereditary tendencies is shown by a large number of more or less complete family histories which contain evidence that a dominant factor is involved. Tumors of the nerve sheaths reappear in successive generations of families. The diseased condition is described as of "benign nature" as contrasted with the malignant sarcomatous growths. It is interesting to note that the presentation of this data illustrates the growing tendency for valuable cooperation between medical and social agencies.

U. S. Bureau of Criminal Identification. *Department of Justice. Report of the Special Agent in Charge for year ending June 30, 1918.* Department of Justice, Leavenworth, Kansas, 1918. Pp. 16.

The increasing popularity of the Fingerprint System of criminal identification is witnessed by the report of the Special Agent, Mr. Renoe, that the Bureau now has 437 co-operators, of which 3 penal institutions, 29 police departments, 40 sheriffs and 35 U. S. Secret Service divisions are new additions during the past year. During the year 49,269 fingerprints and 7,203 Bertillon records were received. From these, 11,903 identifications were made. An increase of 51.8% over the preceding year was noted in regard to "pieces" of information furnished co-operators.

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A CARD FOR RECORDING MEDICO-SOCIOLOGICAL DATA

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In order that the State Board of Charities, State of New York shall at all times know the number of those individuals within its jurisdiction who show symptom-behavior indicating mental defect (intelligence capacity defect and affective deviation), mental deviation, mental disease (psychoses and allied conditions) or other neuro-mental disorders (either congenital or acquired) as well as all other ordinary intercurrent physical diseases accompanying them, it was thought desirable that a card system for the central registration of such social patients be arranged.

The State Board of Charities, through the Division of Mental Defect and the Bureau of Analysis and Investigation makes a record of every individual brought to its official attention by reason of admission to an institution for mental defectives, delinquents or epileptics. The State Hospital Commission handles all cases admitted to hospitals as insane and the Department of State Prisons handles all convicted cases not specifically designated to the State Board of Charities as delinquents. It is thus seen that the initial difficulty in arranging a card system for these mental deviate types was to be able to compress into a restricted space a great amount of apparently unrelated information, part of which was expressed in terms connoting defect, part disease, and part social conduct. After a review of other available systems in use by metropolitan hospitals, clinics, and state departments, it was felt that the end in view could best be reached by dividing the patient's whole life into several definite spheres of statistical interest, thereby correlating them. These several fields of

statistical importance are separated on the card by heavy black lines, as illustrated.

In general the abbreviations used on the card or to be inserted by the physician, clinic, or social worker, are those already standardized for such use, i. e. E—epilepsy; B—blind; D—deaf; T—tuberculosis, et cetera. The other abbreviations will be explained under each of the separate fields of enquiry.

To make for speed and efficiency a simple check mark or a punch from a hand punch is all that is necessary in order to record a positive finding under most of the headings. Names, dates, locations, and a few other facts of personality require writing in. The whole card has been arranged so that the greatest possible amount of clinical and sociological information could be recorded in the shortest possible time and with as little effort on the part of the clinical recorder as is consistent with good case-taking.

Such a card if made out in duplicate by the clinic, the private physician, or social worker everywhere, would at once become a method of community registration for all sick, defective, psychotic, anti-social or dependent persons in that particular district; and the duplicate copy, forwarded to the central State bureau or commission at once becomes not only the record of such registration but what is of even greater value, the State census card for that particular physical or mental disease or defect, including the social dependency problem attached to it, including also the past institutional (tax) record. Thus is furnished an approximate estimate of that person's whole past and future cost to the town, municipality, county or state; all of which is available for yearly summary and should in the long run materially assist in reducing the tax budget for dependent-defective types inasmuch as those who by such a card system are found to be drifting, economic wastage will be removed from their present environment and placed under such inter- or extra-institutional supervision as to offer some hope of rehabilitation through specialized vocational training and other procedures adopted to best serve the ultimate interests of the state.

The card has been designed to meet the demands for a proposed system of state-wide registration of mental deviate types through state clinics for mental hygiene, each of which shall serve a specified district. The same card when filed in the central state bureau and

fulfilling the function of a state census report must needs show all matters relating to legal residence, age, sex, occupation, race, color, religion, citizenship, civil status, and constructive usefulness as a citizen. This it is believed to do in an adequate manner. These card records of all mental and physical diseases and disorders which the social patient may show are not intended to interfere with or replace such cards as are already in use for recording the common acquired (infectious) diseases as required by the State Department of Health.

		F.		M.		F.M.		M.M.		GIVEN		ALIAS		YEAR NO.		7-18-15-5000 (30-1-1901) IDENTIFICATION NO.				
1	Residence County	P. O. Address										Institution				Admitted	Idiot			
	Born when	Where										Single				C.-Lew	Married	Sep.	Div.	Occupation	Lg. Child'n
2	Citizen	Religion	Race	Color	School, City	School, Rural	Grade	Interruptions	Repeater	Rg.	Irg.	Times	1	2	3	4	No Progress	Imb		
	FATHER		Netivity		Citizen	Mentality	MOTHER		Netivity		Citizen	Mentality								
3	PHYSICAL STATUS	Mon.	Cret.	B.	D.	Sp.	Head	Eyes	Arm	Leg	Gait	Trunk	Disease	Trauma	Syph.	Warr.	Blood	Wass. Fl.	Id	Mar
	AFFECTIVE FIELD	Stable		Unstable		Cyclic		Over-Valuation of Idea		Shut-In Type		Frank-Open Type		Other Types						
4	ECONOMIC RECORD	Steady Worker	Intermittent Work		What		Weekly Wage		Truant		Cruelty—Animals		Crime—Property		Crime—Person		B-L			
		Partial Dependent	Public	Private	Complete Dep't	Public	Private	Cause	Sex Offender	Sex Pervert	Pyromania	Homicide								
5	SOCIAL RECORD	Affluent	Comfort	Poor	Squalid	Tramp	Ungovernable	Family Deserter	Illit Consorte	Illegitimate Child		S-N								
		No Anti-Social Conduct		Delinquent, Never Apprehended		Apprehended but Not Convicted		Committed Delinquent Inst.		Sentenced Penal Institution										
6	CIVIC RECORD	No Anti-Social Conduct		Delinquent, Never Apprehended		Apprehended but Not Convicted		Committed Delinquent Inst.		Sentenced Penal Institution										
		Committed Institution, Not Del. Type	State	Mun.	Priv.	Ever on Probat'n	Result	Ever on Parole	Result	Ever in Colony	Result	Ever Boarded-Out	Result	I-C						
7	INSTITUTION RECORD	Orphan Asylum	When	Where	Disch'd	Inst. Del. Children	When	Where	Disch'd	Inst. Del. Adults	When	Where	Disch'd	E						
		Institution Epilep.	When	Where	Disch'd	Institution Insane	When	Where	Disch'd	Inst'n Mental Def.	When	Where	Disch'd	Psych.						
8	HEREDITY	Alms-house	When	Where	Disch'd	Co. Mun. Jail	When	Where	Disch'd	State Prison	When	Where	Disch'd	Al - Rg.						
		HEREDITY. Record Also Any Relatives and Children Who Were at Any Time Inmate of ANY Type of Institution														Al - In.				
9	PRE-NATAL FACTORS											POST-NATAL FACTORS								
												Drugs								
10	REMARKS	Date of This Record		Source of Information, Person				Clinic		Organisation		P. O. Address		M-A						
								Paroled To		Discharged To		Where		Died I-Q						

Fig. 1. A Card for Recording Medico-Sociological Data.

It will be noticed that the top of the card is arranged for recording the married name (for a woman), the father's name, the father's mother's name, the mother's mother's name, and the given name. In this way heredity is traced and linked up by families and fraternities in a state-wide manner. In the case of males a space is provided for an alias.

The "Year No." (number) provides means for recording consecutive admissions, diagnosis, and filing order.

The "Identification No." (number) provides a method of giving all individuals a personal number which becomes part of their institutional case record and serves as a method of central identification.

When a patient is readmitted under a false name and his identity is later discovered, he thus can be given proper identification and classification by the clinic or institution officers handling the case. The original name and identification number are then affixed to the census card in the central bureau as well as on the institution records where he may be, and on the (proposed) registration cards filed with the district clinic or physicians.

The remaining data captions are self-explanatory for the most part. Under "Residence County", write county of legal (voting) residence. Under "Institution" write in name (initials or code) of institution where patient now is, with date of admission. This space then becomes the live institution state census for every defective, psychotic, epileptic, or defective-delinquent person in that State.

Under "Occupation" insert definitely the exact type of work, i.e. carriage blacksmith. For women when actually wage earners, give exact occupation. When engaged in household duties without pay insert occupation as wife of steamfitter, daughter of rug weaver, widow of ship carpenter—hwk (housework).

Under "Lg. Childr'n" insert the number of legitimate children of which the patient is father or mother.

Under "Citizen" always insert the initials of the state of which he is a legal citizen (or citizenship of parents in case of a child). This at once fixes his citizenship not only by state but incidentally of the United States.

Under "Religion" insert usual denominations. When Protestant without affiliations insert "Ind." (Independent).

Under "Race" insert ethnic varieties rather than nationality, i.e. Latin, Slav, Teuton, Anglo-Saxon, Celt. Where these distinctions are difficult to determine or are mixed, indicate by nationality, i.e. English; but this method is not so desirable. All negroes should be listed for convenience as African unless otherwise definitely known, i.e. West Indian—Malay.

Under "Color" insert white, red, yellow, brown, black.

The school record is of great importance. Check "City" (over 2,000) or "Rural" (under 2,000) as indicated; insert the number of the school grade and note major "Interruptions", as scarlet fever, moving of family, et cetera. If the child is a grade repeater check Rg (regular repeater), or Ir (irregular repeater), and check the num-

ber of "Times" he has repeated. For instance, if he is 3 grades retarded check "3". If he has never advanced since he entered school, check "No progress."

Under "Father" insert full name; next country of "Nativity"; country of "Citizenship", and under "Mentality" put the most illuminating one word possible, i.e. mental defect, insane, shiftless, alcoholic, criminal, etc. The same applies to "Mother."

The next space is to record investigations as to physical status. Under "Mon." record Mongolian—developmental defect types. "Cretin" refers to cretin; "B", blind; "D", deaf; "Sp", speech defect (congenital or acquired as aphasia); "Head" (defect, conformation, disorders, microcephalic, etc.); "Eyes" (congenital or acquired: refractive, ocular or muscle disorders); "Arm" (paralysis, trauma, and the like); "Leg", ditto; "Trunk", ditto (including deformities and diseases, as appendicitis); "Disease" (any economic, crippling disorder existing at time of record, i.e. tuberculosis, rickets, infectious meningitis, etc.); "Trauma" (if any); "Syph., presence of syphilitic infection (by history or clinical symptoms); "Wass. Blood", Wassermann, positive or negative in blood; "Wass. Fluid", ditto for cerebrospinal fluid.

The next space between heavy black lines is to record deviations in the affective field. It is believed that this represents the first definite attempt to make a comprehensive statistical resume of the affect component of the mental reactions of the individual. It is to be noted that beginning on the left with "Stable" affective reactions, the data captions afford means of recording increasingly important types of affective deviation, namely, "Unstable" (tantrums, deficiency of inhibition generally); "Cyclic" (fairly regular mood swings, often associated with menstrual periods); "Over-valuation of idea", (conscious ideation has abnormal intensity of affect but the patient is not insane.) Here naturally fall such items as hatred of teacher, hatred of father or mother in children, and also abnormal enthusiasms such as excessive religious fervor, etc. (An expression of transference of the affect of a subconscious complex to one in surface consciousness more acceptable to the personality.) "Shut-in type" (personality potential for dementia praecox. Usually indicates faulty mechanism for mental adjustment.) "Frank-Open type" (personality of labile moods without much shrinking from reality. Potential for manic-depressive psychosis). "Other types", specify.

The next space between heavy black lines is to record reactions in the economic field and is self-explanatory. The "Poor" and the "Squalid" probably indicate mental defect or disorder. "Tramp" indicates the same findings including the transmittable character trait of wanderlust.

The social record is arranged to record the reactions of both children and adults. The behavior of subnormal school children can be noted under "Truant" and "Ungovernable." Pathological deviations are usually clearly shown by "Cruelty—animals." For adults, "Crime-property", while it may relate to either sex is perhaps more typically a characteristic of the predatory male with whom crimes against persons are usually secondary to acquisitiveness or sex matters. "Crimes against persons" are to be noted as perhaps more characteristically primary reactions of females, including sex matters; their crimes against property seem often to be secondary to a primary transgression in sex offense.

Under "Illicit Consorts" may be noted the number of transitory sex partners. In the case of the mentally defective this not infrequently means 5 or 6 such consorts, and is to be distinguished from promiscuous sex offense. Under "Illegitimate Child" record "self" when patient is illegitimate; and record by a numeral the number of illegitimate children the patient had; (make record for fathers as well as mothers.) It will be noted that the card provides means for recording such a case as: "self illegitimate, had 6 illegitimate children, and also had 4 legitimate children".

The next space between the heavy black lines fixes the civic record, and is self-explanatory. After the record of delinquent conduct and sentence to a punitive institution comes a space for recording the facts of such delinquent-dependency as to whether supported by "State", "Mun." (municipal), "Priv." (private) funds. Also space for trial and result when on probation, parole, colony (institution or community type). The results should be noted as 'good', 'bad', 'returned', etc. and indicate the success or failure of the patient's efforts to make proper and adequate mental adjustment; his failures probably depending upon mental defect, deviation, or disorder coupled with environmental-industrial stress.

The next space between heavy black lines refers to the institution record. It is the graphic map, so to speak, of the patient's mental,

physical, and social failures which were sufficiently definite to place him within the ranks of institution dependents. It records the trail of the recidivist. Additional facts as to institution residence, court conviction and jail sentence can be amplified on the back of the card.

The next space under heavy black lines gives opportunity for a brief note as to positive findings in heredity, which should be noted, for instance as: 'pgm psych.' (paternal grandmother psychosis); 'mat. cous. F.' (maternal cousin feeble-minded); 'bro. E.' (brother epileptic); 'm. i. c.' (mother infantile convulsions); 'f. T. D.' (father tubercular and deaf); 'pat. uncle A. B.' (paternal uncle alcoholic and blind.)

In the space below comes "Pre-natal Factors", in which should go those facts denoting disorders of mother or foetus which are believed to have had etiological value for the present condition of the patient. Immediately following this heading comes a space for recording in a similar way those disorders of "Post-natal" life which have causal value for ultimate symptom-behavior. In this space would fall such common incidental causal factors as meningitis (type), important in view of its effect on brain development; scarlet fever (particularly on account of frequency of deafness as sequela); gonorrhoea (on account of its etiological value as to blindness); trauma (followed by scar formation and permanent disturbance of function, particularly for brain and cord.)

Below the next heavy lines is found space for the "Date" when the card-record is actually made out; also the source of information as to whether from a "person" interested in the case, a "clinic" (hospital, dispensary, clinic or institution), or "organization", as any of the numerous social welfare and charity organizations found in all localities, and the address of such informant.

The bottom line of the card affords space for "remarks" which may be amplified on the back of the card.

Finally, the data captions finish with the close of the patient's career as first, "paroled", and then "discharged" (from the hospital or institution), or "died", with date inserted.

The right hand edge of the card is for checking the diagnosis which may be one or more items, as for instance, "Moron, intelligence quotient .58—epileptic—drugs (insert), morphine." These diagnostic items are arranged from the top of the card downwards as follows:

- Idiot: When intelligence quotient is 0 - .20 (Stanford Revision) and mental age 0 - 2 years inclusive.
- Imbecile: When intelligence quotient is .21 - .50 and mental age 3—7 years inclusive.
- Moron: When intelligence quotient is .51 - .70 and mental age 8—12 years inclusive.
- B-L: Borderline, when intelligence quotient is .71 - .80 inclusive.
- S-N: Subnormal, when intelligence quotient is .81 - .90. Intelligence quotient .90 or above, normal.
- I-C: Infantile convulsions in childhood which did not persist as ordinary epilepsy.
- E. Epileptic convulsions, any number, any time, during life history.
- Psych: Psychosis (follow standard State Hospital classification); and allied states (to be further amplified on back of card and in patient's history as necessary).
- Al-Rg: Alcohol, regular user: (type used; mental deviation, and deterioration: type).
- Al-Ir: Alcohol, irregular user: (constant drinking with occasional excess or periodic sprees with intervals of abstinence; frequently associated with psychoses of constitutional type).
- I.Q.: Intelligence quotient, (indicate scale used).
- M.A.: Mental age, (indicate scale used).
- Drugs. Specify, (opium, morphine, heroin, cocaine).

On the left margin are nine letters and nine numbers. By inserting a letter or symbol in front of the code letters an indefinite number of combinations may be had which will furnish information too bulky for placing on cards. A few examples may be cited:

- A-1: Cast committed on order of court of record.
- A-2: " " " magistrate's order.
- A-3: " " " criminal order.
- A-4: " " " poor officer's application.
- A-5: Voluntary commitment.
- B-1: Diagnosis made by qualified physician.
- B-2: " " " competent social worker.
- B-3: " " " untrained lay worker.

The value of such a code grows with use and the multiplicity of the problems presented. In all cases, in each data space when an unsuccessful attempt has been made to secure the facts make a "+" which means "facts unascertained." Never write "unknown" as this answer is never satisfactory. Clinical facts are either ascertained or are not ascertained in a statistical sense.

With the enormous present-day increase of interest in medico-

psychological matters and concomitant symptom-behavior, the need of a coherent record uniting all the clinical facts of the patient's life has arisen. Modern care of the "sick", the "insane", the "feeble-minded", the "pauper", the "delinquent", the "criminal", must take in all the inter-related etiological factors. Heredity, constitutional deviations, organic, bio-chemical and industrial environment all have specific causal influences. The card here described was designed to assist in correlating these very diverse factors and affording means for making the ultimate diagnosis in the case.

SUMMARY.

(1) A card system for registration and census of any type of mental defect, mental deviation, physical disease, trauma, and the symptom-behavior dependent upon such conditions.

(2) Correlation of paternal and maternal names throughout the whole card system; thus linking abnormal and anti-social groups and fraternities.

- (3) Specific facts of heredity recorded.
- (4) Specific facts of pre-natal etiology recorded.
- (5) Specific facts of post-natal etiology recorded.
- (6) Specific data of federal interest recorded.
- (7) Specific data of state (community) interest recorded.
- (8) Specific record as to physical status.
- (9) Specific record as to mental status.
- (10) Specific record as to affective field.
- (11) Specific data as to economic record.
- (12) Specific data as to social record.
- (13) Specific data as to civic record.
- (14) Specific data as to institution record.
- (15) Specific data as to present community or institution residence.
- (16) Specific data as to date and mode of exitus.

A STUDY OF THIRTY-FIVE DELINQUENT GIRLS

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This study represents only such girls as have been brought into the Juvenile Court on various charges, often merely that of dependency shown by the court records. The charge of dependency is usually because of poor home conditions. In some instances the case is one of dependency coupled with delinquency. The purpose of this study is to show the social behavior of these girls in relation to their mental ages.

Table I gives the nationality, time of commitment, and cause of commitment.

TABLE I.

Nationality		Time of Commitment		Cause of Commitment	
Spanish	15 cases	1912.....	1 cases	Dependency	8 cases
Span.-Am.	3 "	1913.....	5 "	Delinquency	16 "
Span.-Eng.	1 "	1914.....	3 "	Dep.-Del.	6 "
Span.-Scot.	1 "	1915.....	5 "	Incorrigible	3 "
Italian	2 "	1916.....	5 "	Dep.-Incor.	3 "
Russ.-Jew	1 "	1917.....	9 "		
Portuguese	1 "	1918.....	7 "		
English	1 "				
American	10 "				
Total	35 "	Total.....	35 "	Total	35 "

The author has used only those cases where she, herself, has given the Stanford Revision of the Binet-Simon Intelligence Tests. Table II shows the test results.

The county from which this study was made is particularly fortunate in the number of excellent homes that are willing to take girls on probation and make every effort to build them into responsible social beings. At times the amount of time and patience that a home will put on a case are quite astonishing. Many homes take these girls as their quota of social work and so give much time, thought and study to the problem. It is seldom want of care or understanding that causes the failure of a girl on probation. The cause lies within the girl herself, by reason of her mentality.

TABLE II.

Name	Ch. Age	Men. Age	I.Q.
1. Frances	16-11	10-1	.63
2. Alice	19-3	9	.56
3. Inez	16-3	9-10	.56
4. Mabel B.	16-1	12-6	.78
5. Daisy	19	13	.81
6. Mary C.	13-1	9-2	.70
7. Sofie	17-3	9-4	.58
8. Ruby	22-7	15	.94
9. Pansy	19	8-4	.52
10. Betty	17-3	11-11	.74
11. Bernice	16-1	9-5	.60
12. Irene C.	14-8	15-11	1.08
13. Violet	16-9	8-10	.55
14. Marguerite	18	9	.56
15. Irene G.	15	9	.60
16. Elsie	17-6	9-10	.62
17. Josephine	14	10-10	.77
18. Serena	13-9	9-2	.66
19. Rose	18-5	14-11	.93
20. Agnes	20-3	16-11	1.06
21. Julia	17-10	12-3	.77
22. Mabel M.	16-11	13	.81
23. Rose	20-10	9-8	.60
24. Lilly	18-2	10-6	.65
25. Adelina	17-7	11-11	.75
26. Marigold	18-6	19-3	1.20
27. Jennie	19-1	10	.62
28. Virginia	20-6	9	.56
29. Lillie S.	15-10	10-2	.64
30. Eudora	21-1	8-2	.51
31. Leona	14-11	12-2	.82
32. Veda	18-5	11-7	.72
33. Mabel W.	18-3	15-8	.98
34. Marie W.	16	15-4	.96
35. Lilly Y.	14-11	15-6	1.04

Of the cases under consideration, eight have been sent to the Good Shepherd Home, in Los Angeles, because they were not safe under such supervision as they would receive if put into homes to do housework. In other words, "they were not able to conduct themselves with ordinary prudence." A brief case study of these cases, will, I think, prove of interest.

Case 1. Daisy, I.Q. .81. Daisy had an illegitimate child at the age of fifteen, the father of the child being sent to San Quentin and the child cared for by a Catholic Humane Bureau. Daisy was placed on probation in an excellent home, but was reported back to the Detention Home twelve times. She would put a dummy in her bed, even cutting off some of her hair to make the dummy more real, and would then go out with jitney and bus drivers for the night, returning early enough in the morning to be found in her room when called. The last time she was brought into the Detention Home she escaped by tying her blankets and sheets together and letting herself down to the ground from an upper window. She was apprehended and sent to the Good Shepherd Home. Daisy will never be a safe, responsible citizen of any community.

Case 2. Pansy, I.Q. .52. Pansy was first brought to the Detention Home in 1915. She was put out on probation in an excellent home, but she seemed to be thoroughly bad and returned to the Home nine times,—once for immorality, the other times for incorrigibility and indolence. She was finally sent to the Good Shepherd Home. Pansy's mentality is of such a low grade, together with an indolence that led to immorality, that her case is one for continuous institutional care.

Case 3. Violet, I.Q. .55. Violet first necessitated probational care in 1916 because of bad home conditions. Her home was the scene of immorality and drunkenness, in which conditions, she became delinquent. She was placed in a very good home but could not keep steady, and after being reported back to the Detention Home seven times for immorality, she was finally committed to the Good Shepherd Home as the only safe course to take for her. With her tendencies toward sexual immorality and her low grade of mentality, she should always be kept in an institution where she can be self supporting and yet be unable to propagate any more feeble-minded like herself.

Case 4. Marguerite, I.Q. .56. Marguerite was brought under probational care in 1914 for delinquency. She comes of a family both sides of which contain long lines of feeble-mindedness. She was placed on probation in some of the very best homes but was returned to the Detention Home nine times for immorality. She contracted gonorrhea and became perfectly incorrigible when sent to the County Hospital for treatment. She escaped from the Detention Home when brought back from the hospital, but was found and sent to the Good Shepherd

Home. Marguerite is a dangerous type, for she cannot control her sexual tendencies and should remain an institutional case always.

Case 5. Rose, I.Q. .93. Rose is a very attractive, quiet appearing, well groomed American girl, whose father was immoral and whose brothers were questionable in their conduct also. She came under probational care in 1915 and had every opportunity to reform. She was placed in the best of homes and her church friends took the deepest interest in her. She accepted all of this at the same time that she was going about with a young married man, in whose home she was employed and whose wife was an invalid. She nearly succeeded in breaking up that home. Five times she was brought back to the Detention Home, being too weak to keep straight. Her entire difficulty seems to be a very weak will which can only be accounted for in her immoral heredity. However, her case is much more hopeful than the case of a girl with a lower grade of mentality.

Case 6. Lilly O., I.Q. .65. This is a case of inherited tendencies toward immorality. Lilly came under probational care in 1915. She is the illegitimate child of a very delinquent Spanish mother and a Scotch father who married the mother after the birth of the child. The mother has been married twice but has lived with and had children by four other men, besides living with still other men by whom she has had no children. (The author has examined three of these illegitimate children and found their I.Q.'s as follows: .52, .60, .69). Lilly is quiet, neat and pretty, but a girl who simply cannot keep out of sexual difficulties. She was brought back to the Detention Home eleven times for immorality and weakness of will, and so was finally sent to the Good Shepherd Home for her protection and the protection of society. She should always be kept in an institution.

Case 7. Marigold, I.Q. 1.20. This is a most pitiful case of dual personality, due to the mixture of good and bad lines of heredity, that has ever come to the author's attention. It is a case worthy of much study and analysis. Marigold is the daughter of one of the lowest of Spanish prostitutes and her father was a "younger son" Englishman of excellent, well educated, middle class stock. The mother died when Marigold was young, of tuberculosis and other complications due to her immoral excesses. The father then placed Marigold in an Episcopal convent where she had excellent care and training. The father returned to England, but it was said he sent money for Mari-

gold's support up to the last year or two that she was in the convent. A sister of the mother took her from the convent to put her in a house of prostitution which she was running, but a friend of the father, a reformed prostitute, found this out and took Marigold away. She was placed under probational care in 1915 in the town in which she was born. She was put into a very good home, where she had every care and was well looked after, but she was too weak willed to hold a steady course. She knew what she should be and the convent had given her a great desire for an education, to which her mind was fully equal. She wanted to be all that she was equal of being, but she would not work steadily. She showed real musical ability, and was given music lessons but would not practice; she was given library and study privileges but read and studied only in the most superficial way. She simply could not work. She wanted and had all the dainty things for her dressing table, and dainty slippers and dressing gowns, but kept her room and dressing table in utter disorder. She never, however, quite went over the line of immorality, but always to the very edge. A large, exuberant, gay type, fond of a gay time and admiration. She was brought back to the Detention Home to try to steady her up, and was trusted and given full liberties. She took music lessons and studied but some delinquent girls were brought into the home, and she finally ran away with them. They were all apprehended, and Marigold was sent to the Good Shepherd Home to see what regular living, discipline and a complete breaking away from old associates would do for her. It is the opinion of the author, who knows her well, that if she is tided over a few years and forms regular habits and quiet ways of living, the better side of her heredity may become the dominant side, especially since she herself understands her own situation thoroughly and realizes just what she has to battle against. It is an interesting battle between two diametrically opposed lines of heredity, and one can only conjecture which will become the dominant line.

Case 8. Astor, I.Q. .96. A young, suave, fair-haired southern girl, who came under probational care in 1917, the charge being delinquency. She was found consorting with colored men, and had been in the Juvenile Court of another city for the same reason. She ran away from the latter place and came to this city in company with a colored man, with whom she lived in the rooming house of a colored

woman until both were apprehended. Two colored men have gone to San Quentin on her account, and the testimony in each case shows that she was far from blameless. Put on probation in a very good home, she lost no time in starting again her delinquent career, this time selecting movie actors. When left to herself a few hours of the day, she donned the best clothes of her employer, took a cab and went about town, stopping in various shops and calling up movie men on the telephone. Her career was short and for safety's sake she was brought back to the Good Shepherd Home. There she has shown the same sly character and she must be continually watched for her deceitful, cunning ways. It is the opinion of the author that Astor is a moral pervert of an incurable type and should be kept under institutional care for many years, if not for her lifetime. She will always be a menace to any community where she is allowed her freedom.

In these eight cases there are but three of normal mentality. It is not difficult to find the reason for the unsocial behavior of the five whose I.Q.'s are .52, .55, .56, .65, .81, when one considers that they all have immoral heredity back of them. In the cases of two the reason undoubtedly lies in the heredity alone; in the third case little is known of the heredity.

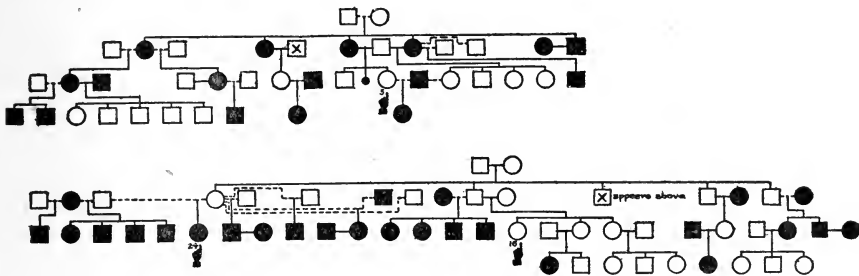


Fig. 1. Genealogical chart. Black symbols represent cases of illegitimacy. Squares indicate males, circles females. Illicit relations indicated by dotted horizontal lines connecting individuals.

A fair sample of the genealogy of the thirty-five cases is given in Fig. 1. It contains two of the Good Shepherd Home cases and the case of one sub-normal girl, not in the Good Shepherd Home, who has never caused any trouble or shown the slightest tendency toward delinquency.

A short account of each of the remaining twenty-seven cases is

given in the following paragraphs, showing the relation of mental age to social behavior.

Frances, I.Q. .63. Spanish. Frances was never reported back to the Detention Home and was doing well in a good private home, but just now is causing the probation officer some concern.

Alice, I.Q. .56. Spanish-American. Alice has already had one abortion, and is now ill of tuberculosis of the bones. She is in the Detention Home because she always requires custodial care.

Inez, I.Q. .56. Spanish-American. Inez is doing well in a hospital where she works during the day, but she must always have custodial care to the extent of returning to the Detention Home every night.

Mabel B., I. Q. .78. Spanish. Mabel is in the home of her parents caring for her illegitimate child, and requires the care of her mother.

Mary C., I.Q. .70. Italian. Mary is in an orphanage and is very good under custodial care but is too acquiescent to look out for herself.

Sofie C., I.Q. .58. Italian. Sofie is in an excellent home where she is doing well for the present.

Ruby, I. Q. .94. American. Ruby is over the juvenile probation age, so was placed out to work in a hospital, but she left the hospital and her whereabouts are unknown. She was a girl of apparent refinement brought in for stealing and vagrancy. She lied about her age when arrested as she said she did not want to remain in the city jail. She will undoubtedly be a problem to some police court soon.

Betty, I.Q. .74. Spanish. Betty was first committed for incorrigibility, and was placed in an excellent home. She was brought back once for immorality, which she acknowledged. The same home asked to have her back and she is now doing well but only under the most constant supervision.

Bernice, I.Q. .60. Spanish. Bernice is the illegitimate child of very delinquent parents. She is in an excellent home but has been brought back twice because of questionable associates.

Irene, I.Q. 1.08. American. Irene is in a fair home where she is sent to school. She is very conceited, dreamy, and lies in a conceited way. She writes letters to her girl friends filled with the most fantastic lies, such as: "I went to a party last night and four boys fought over who should dance with me. I have three lovely new silk dresses, etc. . . .", not a word of which is true. Her father was a drunkard

and a well known liar. The mother died when the children were young. The twelve year old brother is in Whittier State School and has an I.Q. of .88.

Irene G., I.Q. .60. Spanish. Irene works out by the day, but always has custodial care. She is an institutional case.

Elsie, I.Q. .62. Spanish-American. This very pretty little Spanish girl, who is shown in the genealogical chart, and whose sister was delinquent but is now reformed, has never shown the slightest tendency toward delinquency. She is in an excellent home and doing well.

Josephine, I.Q. .77. Spanish. Josephine is placed in a good home where she is getting home training, but she is worth little more than her board. She has been reported back three times for incorrigibility.

Serena, I.Q. .66. Spanish. Serena was brought in for delinquency. She was assaulted but careful investigation showed that she was as much to blame as the man. She was given back to the care of her parents and put back into school, but her teacher now reports that she is again showing delinquent tendencies.

Agnes, I.Q. 1.06. American. Agnes was brought in with Ruby for vagrancy. She has been placed in an excellent home but has not shown herself entirely responsible, wearing the best underclothes of her employer, etc. She may build up, however, when some of her old habits are overcome.

Julia, I.Q. .77. Spanish. Julia was brought in for stealing in 1916. She was placed in an excellent home, where she is treated as one of the family, and has been taught to sew, for which she shows considerable ability. She has never been reported back to the Detention Home, helps her family and is doing well in every particular.

Mabel M., I.Q. .81. Spanish. Mabel was brought under probational care in 1917 because of bad home conditions. After being placed in a home where it was found that conditions were not favorable to her advancement, she was transferred to better home conditions where she is doing well. It is the belief of the author that Mabel's mind could be developed very much by training, for she shows much promise mentally, notwithstanding the fact of her "dull-normal" rating.

Rose N., I.Q. .60. Russian Jew. Rose has been a delinquent intermittently since 1913. She is now one of the young married mother problems. She is dirty and has to be cleansed of vermin every time

she is brought into the Detention Home. Her husband is in the war and her mother-in-law is caring for her one child. Rose is "about town."

Adelina, I.Q. .75. Spanish. One of the conceited types. Adelina is in a very good home but has been reported back eight times,—twice for moral breakdown, and for lying, stealing and untrustworthiness.

Jennie, I.Q. .62. Spanish. Jennie is very pretty, well dressed and extremely neat in every particular. Was brought under probation at the age of thirteen for delinquency. She is easily led, and has been brought back five times for being a party to the delinquency of others, but is doing well at the present time.

Virginia, I.Q. .56. Portuguese. Virginia was brought under probational care in 1913. Her brother took charge of her, and furnished a new house for her, in which she took much interest, but her interest was of short duration, and she soon became delinquent again. She was returned to the Detention Home eighteen times, sometimes of her own volition. In 1916 the author examined her and urged custodial care, but she became of age before this was accomplished and married. She has one child and is now one of the unsocial mother problems. A very good housekeeper and general maid, but she is so quarrelsome that she disintegrates the help in any institution where she is employed, and is too unstable to keep a position in a private home. She should be committed to an institution for the feeble-minded.

Lillie, I.Q. .64. American. Lillie's mother died in Agnew Insane Hospital, one brother is in the State Home for the Feeble-minded, another brother was committed to Patton for the crime of living with Lillie as his wife. He was clearly feeble-minded and did not belong in San Quentin, so because of his heredity and strange behavior he was sent to the insane asylum. He escaped and is now at large. Lillie was committed to probational care and was placed in an excellent home, but she continues to be immoral whenever opportunity offers, and has also been brought back for stealing, three times in all. She has such a morbid heredity, which, taken with her low grade of mentality, makes the author doubt if she will ever be able to look after herself successfully. She should be in an institution.

Eudora, I.Q. .51. American. Eudora is thoroughly immoral

1913. She was in the Good Shepherd Home for two years and it is due only to the good training in laundry work that she received there through her feeble-mindedness and has been under probation since that she is now able to carry herself financially. After coming from the Good Shepherd Home, she was placed in the care of her mother, but she became delinquent and had an illegitimate child. As she is twenty-one years of age, she is no longer under probation. She should be placed in an institution for the feeble-minded to save her from having any more feeble-minded children, which her baby shows every indication of being.

Leona, I.Q. .82. American. Leona was placed under probation in 1917 for both delinquency and dependency. Her mother, who is said to be epileptic, was thoroughly immoral in her conduct and was making her daughters delinquent also. Leona is slovenly and immoral, coarse in the attitude of her mind. It will take a long period of patient custodial care to socialize her, if such is at all possible, which the author doubts. She has been returned to the Detention Home three times and is now there awaiting trial on a charge of immorality.

Veda, I.Q. .72. American. An older sister of Leona, who was put under probation in 1916 for delinquency. A large, neat girl of good appearance, who was very animal in her tendencies. She is in an excellent home, where she is given every opportunity for improvement. She has been returned twice for immoral conduct and twice for being a party to the delinquency of others.

Mabel W., I.Q. .98. American. In the estimation of the author, Mabel is a moral imbecile. While in the intelligence test she makes the grade for normal mentality, in her conduct she shows no moral sense whatsoever. She has had one illegitimate child and shows no desire to lead a moral life; she has no physical reserve. Because of her persistent delinquency, she was sent to the State School for Girls.

Lilly, I.Q. 1.04. English. Lilly was brought under probational care to protect her from the pernicious influence of a fussy, nagging uncle, who was nagging her into an attitude of incorrigibility which was foreign to her character. The uncle brought Lilly over from England before the war broke out, and when she came under probational care it was impractical to try to send her back home. She is placed in an excellent home, where she is allowed to go to school and is doing well in every particular.

Table III sums up the findings of these twenty-seven cases. Many of these girls are nearing the age of twenty-one years, when they will no longer be wards of the Juvenile Court, and some have already passed the legal boundary line. What is to become of them when they are no longer subject to probationary supervision? Is it reasonable to believe that girls who have been delinquent intermittently from the age of ten or twelve years to eighteen or nineteen years, are kept from further delinquency only by the closest supervision of the probation officer and the most patient and understanding care of the employer,—the slightest relaxation of either of these bringing disaster,—will, with their low grades of mentality, be able “to compete with their fellows on equal terms” at the age of twenty-one years?

TABLE III.

- I.Q's. .80 to 108, seven cases.
- 2 cases need little or no custodial care.
- 1 case sent to the State School for Girls.
- 2 cases must have custodial care constantly.
- 2 cases are vagrants.
- I.Q's. below .80, twenty cases.
- 4 cases have never been brought back into the Detention Home.
- 1 case of the above 4 cases has never shown any delinquent tendencies.
- 6 cases will always require constant supervision.
- 10 cases have been reported back from one to eighteen times.

Something more sensible must be written into our laws governing these cases than the mere chronological age of twenty-one years. The price in crime, prostitution and disease is far greater to our state than segregation and institutional care would be.

These sub-normal girls are, for the most part, well formed physically and show few signs of subnormality, and many are vivacious and of bright appearance. When brought into the Detention Home they are thoroughly cleaned, passed through the free clinic and dispensary and put into good physical condition. Their clothes, teeth and hair are looked after and they are put out on probation. What less can be done if they are to obtain and maintain positions and be tried out as probationers?

And so the riddle goes, to which we must find a better answer than we are able to give at the present time, with our unmodern public opinion and our lack of means for caring for the subnormal of our state.

Comparatively few of these cases need come before the Juvenile Court, if proper care were given for the finding of them in the public schools. That is the place to deal with sub-normality if we are to do preventive work. Why wait until these undeveloped, unsocial child-minds have grown up bodies and take the paths which their bodies demand and which their minds are too unformed in judgment to refuse?

The whole nation is now aroused to protect, develop and nourish our children, who are children both in mind and body, why should not the same protection, thought and money be given to our children of the grown up bodies? They are as much children as those whose bodies correspond in development with fewer years. The delinquent girl should never be censored by society, but should be protected, because of the child that she is.

A SURVEY OF AN OPPORTUNITY SCHOOL.

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The school under consideration is composed of several separate cottages and occupies half a city block. The ground and buildings were purchased by the Board of Education, in what was formerly a residence block in a poor and crowded section of the city. The undesirable buildings were removed, and the others remodelled to suit the needs of the special school to be established there. There are in all seven buildings:—the administration building, the schoolroom, the girls' cottage, the boys' cottage, manual training shop, and two other cottages where school work and other activities are carried on. In one of these the younger children spend most of the day doing book work and hand work of various kinds. This group of children do not participate in the cooking, sewing, manual training, etc., which characterizes the daily performance of the rest of the children of the school.

The spacious schoolroom is outfitted with a piano, tables and chairs, also some few desks of the ordinary school room type. The walls are finished with a soft gray paper, giving both freshness and light; and bold interesting mottoes adorn the wall spaces. Before the windows are boxes of greenery and gay flowers. Collections of nature specimens such as birds, butterflies, wood berries and autumn leaves all tend to make the room cheerful and interesting. Here the children spend half a day at the regular schoolroom studies, reading, writing, arithmetic, language, spelling, geography and history. The other half of the day is spent in the manual training shop, or the boys' or girls' cottages, doing work of a very different sort. The emphasis, however, is not on the formal studies but rather on the hand work. A certain amount of the regular schoolroom work is demanded by the parents of the children, although the teachers here realize the futility of it in the majority of the cases in the school.

The output of the workshop is indeed surprising. Here the boys are taught woodwork, from the simplest kinds of joints to more elaborate cabinet work. The boys have added many useful articles to the

equipment of the school such as bookshelves, tables, desks and mended chairs. Old furniture of the rare antique type found in the second hand shops and bought for a small sum is redressed and refinished by the boys, and thus made into articles either for use in the school or to be sold and the proceeds added to the school fund. Smaller things as boxes, doll houses, serving trays, etc., are also made for sale. This method has the twofold purpose of keeping the boys and girls supplied with really useful work and at the same time helping to maintain the school.

The chair caning and reed work, done by the boys' cottage, have reached quite business-like proportions. Chairs that seem useless are mended and fixed up in the shop and then recaned in the cottage. The boys' occupations are not confined, however, to woodwork and other things usually given to boys. They are taught to sew, mend their own clothes, and some even do fancy work, particularly knitting.

The toy department is a revelation. There are dolls of all sorts and sizes, with the most complete wardrobe imaginable. There are indestructible toys of wood, representing various members of the animal kingdom and fairyland. There are doll houses with every room complete with rugs, curtains, bedclothes, upholstered furniture for the parlors, and furniture suitable for each of the other rooms. Every item is a product of some child in the school, and many are real works of art. There are baskets, trays, embroidered articles and other things too numerous to itemize here. Their sale room is a veritable gift shop, and with prices more moderate than are found in the usual downtown shop.

The girls, like the boys, have regular school work for half the day and the rest of the time is devoted to sewing, cooking, mending, knitting, fancy work, basketry, painting and other manual arts. Lunches are prepared by the girls in their cottage for the entire school. The children bring their own sandwiches and rest is furnished. Each day something warm is prepared by the girls under the direction of the teacher, who is a university graduate in home economics. Both the washing and ironing for the school, including cooking aprons, towels, curtains, small rugs and the like are done here. The girls are taught to make their own clothes and hats, and to do all kinds of housework.

Great credit is due to the most efficient and capable principal

of the school, who was in truth responsible for its organization and who is the central figure of the school. The weight of the responsibility, the labor and the success rests upon her and her teachers. In the beginning only mere necessities (and not all of these) were turned over to the school. In order to conduct a school of this sort it is necessary to have materials with which to work as well as tools and other equipment. Most of these have been procured with money from the sale of the work the children themselves have done. Chair caning, refinishing chairs and other furniture, making of ordered garments, the sale of toys, etc., are the chief sources of income, aside from small donations of materials of one kind and another that come in from a few people interested in the progress of the school. This has all meant a hard uphill task for those doing the work. Such a project should be maintained by the Board of Education, with sufficient funds and support to make rapid development possible. The chintz curtains, the tables, the cupboards of the dining room, the bookcases, even the linoleum for the floors had to be purchased with money made by the school.

However, the teachers are provided and paid by the Board of Education, as the school is a part of the public school system of the city. Books and papers, i.e., such as are included in the supplies of any ordinary school are provided by the Board, and also the upkeep of the buildings and grounds (not including interior decorations nor any accessories). In all else the school is self-supporting.

PERSONNEL.

The children who come to this so-called Opportunity School are certain children from the ordinary public schools. Some are sent by their former teachers, some by the Juvenile Court. They fall into three main classes: (1) incorrigible, (2) subnormals and (3) truants. The incorrigibles are those who are sent to the school because their former teachers found them unmanageable or unruly in some way. This group also included those from the Juvenile Court who have committed some minor offense and are sent here on probation so to speak, rather than to one of the regular institutions for punishment or correction. Those entered as subnormals are those whom their teachers considered unable to keep up with the regular class to which they formerly belonged, those who had fallen behind for some reason, known or unknown. The truants were those, as the name implies, who

were constantly on the truant list. Usually after being rounded up by the truant officers they were turned over to the special school, either after passing through the court or otherwise.

Special care is taken to have the children of the Opportunity School watched after by the truant officer and to attempt to force their regular attendance. Many of them are court cases where a part of their probational requirement is to be regularly at the school. The entire roll of the school includes about 130 children, but the average attendance is considerably less than that number. Of the 111 children for whom records were compiled, the grouping was as follows:

Incorrigibles	45
Subnormals	60
Truants	6

Of necessity some children fit into more than one class, but they have here been classified according to the cause for which they were sent to the school. Naturally, some of those entered as incorrigibles (i.e., children who could not be managed by the teacher) were also children who were not progressing in their school studies with the rest of the class. Likewise some of those who were sent to the school for repeated truancy were in the incorrigible class. But this method of classification gives some idea of the general types of children to be found in the Opportunity School.

The purposes and aims of the school are implied in the name which is applied to it, although explanation is quite necessary for the reason that the name Opportunity School is being applied to a very different sort of school in some other cities and in much of the literature. In this instance it is a school where the children are given a chance to make good or perhaps to catch up with the regular class from which they have been dropped. At least such is the aim of the school. There is no stigma attached to the children who attend this school; it is merely a school for a particular purpose and to fill a need not otherwise supplied for the child who is irregular in some way or retarded. The children are given other things to do besides bookwork, to provide an opportunity to learn some sort of occupation and perhaps vocational work, which may enable the child to be more nearly independent in the future. For the court cases it affords a place where the child can go on with school work of a varied nature and yet be under court supervision. If at any time the child abuses the pro-

bational opportunity that has been given to him and offends against law or stipulation, he may be sent to the State Reformatory or the Industrial Home. It will be noted therefore, that this school differs from those usually called Opportunity Schools and yet the name is no less **applicable** here. However, this point should be borne in mind when considering the type of cases and the results of the survey.

The nationality of the group is given below:

White (presumably American).....	47
Black (pure and mixed).....	43
Foreign	15
Nationality unknown	6

Of those grouped as foreigners there were representatives of many lands, and of those classified as American many were of foreign descent.

The ages of the children ranged from seven to seventeen, in numbers as follows:

No. of Children.	Age.
1	7
0	8
1	9
6	10
5	11
22	12
19	13
26	14
24	15
6	16
1	17
<hr/>	
Average age	13.2
Median age	14 1.19

TESTS USED.

First of all, individual tests were given to as many as possible of the school. This included most of the children of the regular attendance list; but with the large percentage of usual absentees it was impossible to find every child there on the days set apart for the work. It was possible to get records for 111 children which was practically all of those who attended for any length of time. For the individual tests the Yerkes-Bridges Point Scale was used. It is on the basis of this that the individual reports throughout this study are made. In

addition to the individual tests, educational tests in arithmetic, spelling, reading and language ability were given. For the arithmetic test the Woody tests, Scale A, were used in all four processes (i.e., addition, subtraction, multiplication and division). The Ayres Scale was used for spelling; the Standardized Reading Paragraphs by Wm. S. Gray used in the Cleveland Survey, were used for reading; and the Trabue Language Scale B was used for language. A number checking test was added to the list of group tests.

Results of the individual tests. The mental ages obtained by the Point Scale ranged from 5.7 years (a child of chronological age 14) up to 18+ (a child of chronological age 12). The average¹ mental age was 10.7 years, the median mental age 10.5. The average mental age is thus 2.5 years less than the average chronological age. A correlation between the ranking according to chronological age and according to mental age of the entire 111 children gave only .37 which gives no indication of correlation. The average C. M. A.² is .828. According to the Point Scale results, the whole group is divided thus:

	No. of Cases	% of Cases
Feeble-minded	35	31.5
Backward	37	33.3
Normal	34	30.6
Bright	4	3.6
Very Bright	1	1.
	<hr/> 111	<hr/> 100

This gives for the school a very small percentage of normal children, but this, from the very nature of the school, is what we should expect. The more surprising thing is the large number of feeble-minded, and the presence of a few bright children. We should expect

1. In reckoning this average, all between a given year and the next year above were counted of that year. For example, 12.3, 12.5 and 12.8 were classed with 12. Throughout the rest of the paper, they are all treated as separate values, or degrees of mentality.

2. C. M. A. refers to the Coefficient of Mental Ability as determined by the Yerkes-Bridges Point scale. It represents the relation between the chronological age and determined mental age and is thus practically analogous to the Intelligence Quotient of the Binet-Simon scale.

the backward class to be the largest as indeed it is. But to find 31.5 per cent of the whole attendance feeble-minded is both surprising and alarming. Its effect on the school as a whole will be discussed later, but it is a fact to be borne in mind by the reader.

Of the bright children, three of them were entered as incorrigible and one as subnormal. The one entered as subnormal had a C. M. A. of 1.14, which puts him without doubt far above the subnormal group. The one boy ranking as very bright was entered as incorrigible (also truant). This is, of course, not wholly inconsistent with the fact that he had a C. M. A. of 1.33. He was a clean interesting chap, who claimed that it was not interesting to stay in the regular school because he never had enough to do. Consequently he amused himself with all kinds of devices and tricks amusing to boys, but decidedly annoying to teachers. Then, too, every so often he decided to take a few days off, play on the streets and do what he pleased. For this type of boy this school was not the place. An opportunity school of the type where the child is pushed along in his work as fast as he is able to complete the assignments would be a more likely solution of his difficulty.

Grouping the children according to the cause for which they were committed to the school we get the following division of mental ability:

	Very Bright	Bright	Normal	Back- ward	Feeble- minded
Incorrigible	1	3	23	15	3
Subnormal	0	1	10	18	31
Truant	0	0	1	4	1

There is not a direct correlation between the mentality and deportment. More than half of the incorrigible group were normal mentally; the rest were distributed with some in each of the other groups, a large part of them (15) being classed as backward. In these cases one can not tell whether the backwardness is the contributing cause towards the incorrigibility or whether it is the result of the bad deportment of the child and a lack of application and fitness to studies and other tasks.

Of those grouped as subnormal on entrance to the school, 31 were diagnosed as feeble-minded, which is a little more than half of the entire group. These should never have been sent to this school, or having been sent should not have remained. In only seven out of the

total number of feeble-minded cases (35) was the progress reported by the teacher as good. In other cases it was merely fair, poor or none at all. This would indicate that most of this particular group do not belong in nor profit by a school of this sort. The highest C. M. A. of this group was .73, the lowest .31. The few children of this group, whose progress was reported as good had C. M. A.'s in the upper portion of the range just given. The others belong in an institution where they may have continual guidance and where the chief aim is to care for them and tend to their bodily needs. In a group of children who can and do make progress from day to day, these feeble-minded children become a hindrance to the rest of the group and take the time, energy and care of the teacher who otherwise might devote her whole study and work to the children who can really profit thereby. It makes the whole course unnecessarily complex.

No sharp division can be made between the truant group and the incorrigible group. Some children were offenders in both lines. It is usual that the child who is hard to manage in the school room is also the one that "plays hooky" from school. The only basis for the division here is that fact that they were sent to the school for repeated truancy, whereas others who were sent were also incorrigible in other respects and were sent by the teachers under whom they formerly attended rather than by the truant officer. They were reported by the teachers at the Opportunity School as making fair (or better) progress with the exception of one, diagnosed as feeble-minded. This one showed no progress and will always need guidance and be dependent.

A comparison was made between the white children and the negro children on the basis of the C. M. A.'s of each group; also between the white children and the foreigners. The sizes of the negro and white groups are very near the same, but the foreign group was much smaller than either.

Group	No. in group	Average	
		C. M. A.	Median
White	47	.83	.84 .15
Negro	43	.82	.84 .12
Foreign	15	.80	.85 .17

It is interesting to note that the average C. M. A.'s for the several groups are very nearly the same; especially is this true for the white

and negro groups. This would seem to indicate that there is no race difference so far as these children are concerned. As they come from all parts of the city the sectional element is lacking.

Educational tests. As mentioned earlier, class tests in reading, language, arithmetic and spelling were given. Although some of these tests were given at several different times, within a few days, nevertheless it was impossible to get records for all of the 111 children because of the large number of absentees during the time. In fact a high percentage of absentees is a regular occurrence. The number checking test was given to 115 children, the reading test to 116. The total number of children tested by the other Educational Standards was smaller for two reasons. In the first place, these two tests were simpler to give and consumed less time, so repeated attempts were made on several days so as to get as many children as possible. Where some children received the test more than once in this way, only the first record was used. This method enabled the experimenters to obtain a large number of records. This method was not so practicable for the language, spelling and arithmetic as they require a longer period, and it interrupted each class room too often to give them repeatedly. The second reason is that the most inferior children are grouped together in a separate cottage, where they are given class work all day and very little of the manual work. An attempt to give the tests to these children brought out the fact that they could do nothing at all with them. If these were included with the whole, the averages would be even lower than they are. What change there would be, would be in a downward direction.

The group mentioned above consisted of 22 children. Those who could be made to understand the tests were brought over to the school room to take the tests with the other children. Of these 22 children, there were:

Feeble-minded	13
Backward	7
Normal	2

Of the two who were normal, one was seven years old, the other ten. The effect must certainly be bad to have young normal children housed up all the day with a group, most of whom are feeble-minded. They certainly have not the chance to progress in a normal healthy manner.

Reading. The usual method of procedure with the Oral Reading Test of the Standardized Paragraphs by Wm. S. Gray³ was followed.

In tabulating results a record was taken of the time used in reading each successive paragraph and also the number of errors for each. In grading the results for this school criterion or Standard A⁴ was used, because of the ungraded condition of the school. The number of paragraphs correctly read according to this standard was then used as the score for the individual, and they were ranked accordingly. The grades ranged all the way from no paragraphs read successfully (13 children) to 12 paragraphs read successfully (1 child). The median score was 4 paragraphs, which is very low for a school in which the average age is 13.2 years.

No. Pars. read successfully.....	0	1	2	3	4	5	6	7	8	9	10	11	12
No. children reading same.....	13	11	9	10	25	4	14	7	9	4	7	2	1

Some peculiar results were recorded for the reading of certain children. Many children inverted the word "saw" and called it "was". The word "dog" was called "goat" by two brothers. They read at different times during one morning session, but it is certain that they had not seen each other in the meantime. Another child could not talk plain enough to be understood at all when he read, and still another could not read at all, but made things up that were not in the text. In the paragraph beginning, "The boy had a dog", the child read it as "The little bird fly to the nest" and seemed to be quite satisfied that he was reading what was on the page. These are but a few samples of the many peculiar results that were noted in the reading test. The group as a whole was sadly lacking in reading ability and this is a very serious handicap even in this school.

Language. Results were obtained with the Trabue Language Scale B⁵, for 86 of the children. The grades ranged from 0 to 15 points

3. Judd, Chas. H. *Measuring the Work of the Public* (Cleveland schools Education Survey) 1916, pp. 260-275.

4. *ibid.* cit., p. 270. "A Record is checked as a failure if:
(1) it is not read because of previous failures,
(2) it is read in 40 or more seconds, with 5 or more errors,
(3) it is read in less than 40 seconds, with 7 or more errors."

5. Trabue, Marion Rex, *Completion-Test Language Scales*, Teachers, College, Columbia University. *Contributions to Education*, No. 77, 1916. For method of administering tests, see pp. 20-22; for method of scoring, p. 80.

(the highest possible score being 20). The average grade for the group was 9, the median 10, with an A. D. of 3.

Comparing the median of the group with the medians found by Trabue for the several grades, the ranking of the school would be somewhere between grades 5 and 6 of a regular public school. With the average mental age of the school at 10.7, this rank in the Language Scale is not particularly low. It is in fact quite in accord with the mental ability of the school as a whole.

Spelling. Inasmuch as the children of the school are not divided into graded classes, it was impossible to give the spelling tests in the usual way. In order to have some idea of their spelling ability 40 words of the Third Grade and the same number from the Fourth Grade lists⁶ were given to as many of the children of the school as possible. On the day that the Third Grade list was given the attendance was so small that the records obtained did not represent enough of the school to make them usable. For the Fourth Grade list 70 records were obtained. The lowest record was again zero, the highest 100 per cent with an average of 43.5. The median grade was 37.5, but there was an A. D. of 29.6, which shows the wide scattering of the grades over the entire range. The greatest number getting any one grade was 8 children, grade 0. The norm for these lists is 73 per cent.

Arithmetic. The Woody Arithmetic Tests⁷ including all four operations were given to the school. Scale A was used and the class score for the school reckoned according to Woody's Manual. The results are as follows:

	Score	Norms	Approximate grade
Addition	5.63	6.11	IV
Subtraction	5.35	5.47	V
Multiplication	3.74	4.05	IV
Division	3.32	3.21	IV

The meaning of these scores is briefly this: when compared with the average grade school the rank of the school here is that of a fourth grade class of average rank in all operations except subtraction where it is that of a fifth grade.

6. Ayres, Leonard P. A measuring Scale for Ability in Spelling, New York, 1915.

7. Woody, Clifford. Measurements of some achievements in Arithmetic, Teachers' College, Columbia University Contribution to Education, No. 80, 1916. For method of scoring, see p. 14 ff.

Number Checking Test. The number checking test used consists of a sheet of paper on which all the numbers up to and including 50 are scattered without order over the sheet. The individual is instructed to place his pencil in the small circle at the upper left hand corner, and when the signal is given to go from there, making a mark of course, to number one, then to two, then to three and so on through the numbers as fast as he can. He is further instructed to raise his pencil and stop when time is called. The time limit is 2 minutes. The point then is to compare the speed with which the different children can pick out from the scattered numbers the desired numbers in order. The number reached indicates the score.

The highest number reached by any child was 32, and three failed to perform the test correctly at all, receiving a grade of zero. These three children were all of the very lowest of the feeble-minded group. In this respect the test was rather satisfactory, in that all the children, practically, could do something with it. The average number reached was 16.9, for practical purposes 17. The median was 16, with an A. D. of 4.8. This is one test in which it is not difficult to get the children to do their best. It is interesting to them and the element of competition is very evident. When compared with the norms obtained from regular school children on this test, this school reached about fourth grade (16).

Correlations. For purposes of comparison between the educational tests and the individual tests, records were selected for forty children who had all of the tests except the arithmetic. These forty children were then ranked according to their grades in the respective tests and the correlations worked out by means of the Pearson formula. The following correlations were obtained.

Mental Ability with Language.....	.41
Mental Ability with Reading.....	.63
Mental Ability with Spelling.....	.61
Mental Ability with No. Checking.....	.16
Reading Ability with Language.....	.56
Reading Ability with No. Checking.....	.27
Language Ability with Spelling.....	.66
Reading Ability with Spelling.....	.77
Language Ability with No. Checking.....	.21
Spelling Ability with No. Checking.....	.38

It will be readily seen from the table that practically all of the correlations are insignificant unless it be that of reading ability with spelling. This one (.77) is high enough to show some relationship. We might naturally expect a correlation between ability to spell and ability to read inasmuch as the one depends to a large measure on the other. Even though there may be some correlation between some of the other abilities in an average normal school, there might not be here, for the children are all of abnormal inclinations and show erratic and sporadic tendencies.

INDIVIDUAL CASES.

Some very peculiar types are met with in examining a school of this sort, and some of them should be mentioned here as bearing on the conclusions. One boy, who seemed retarded, in school work at least, was suffering from a very bad case of strabismus. The eye trouble seemed to be the chief if not the only cause of the retardation. It is quite likely that with proper care and treatment, he might have greatly improved. Another child had defective hearing as the chief cause of his retardation. In tests of performance he did average work, but when oral questions were given him, he looked at the experimenter in a foolish fashion, and merely answered, "Huh?" or, "What did you say?" Another case where physical defect was very evident was a little boy who could not talk plainly. There was some defect of the tongue or palate, so that the child could not articulate clearly enough to be understood except at rare instances. His C. M. A. was .60, so that it is not likely that it would have been raised materially had he been more readily understood. Not only does he not get the kind of instruction that he needs, but he is also a hindrance to the rest of the children in his class. As there are institutions that take care of each of these special cases, they should be placed in such, and not kept here in the Opportunity School.

Those showing mental and nervous disorders were of several different types. One child of the so-called "nervous type" whose hands trembled most of the time beyond control had also slight tremor of the head. This child had a C. M. A. of .54, so was most certainly feeble-minded. Another child with a decided speech defect, shows a marked tendency to be easily angered. Without any intentional provocation he is aroused to antagonism towards his teachers, playmates and experimenters. He is very slow to comprehend the ques-

tions put to him and often sulks and refuses to answer. His playmates say of him, "He's off in the head". He takes the attitude that every one else is trying to fight with him; he is ever ready to strike. He, too, is a menace to the rest of the children. His attitude towards the examiner was very different from that of another lad, who suddenly looked up and said, "Yo' done as' me the funniest questions". But this last mentioned lad had a C. M. A. of 1.11, the former .77.

One boy, with a C. M. A. of .81, complained of having heart trouble and of not being able to see well. As a matter of fact, he had marked symptoms of syphilis. Such a child is a decided menace to the rest of the group and for that reason, if no other, he should be isolated from the rest and given appropriate treatment for the disease. Another boy, a rather handsome lad with rosy cheeks, bright brown eyes, and healthy looking,—although 15 years of age, has the mental ability of a child of less than six. (C. M. A. - .33). He showed up best in the test requiring reaction to the three Binet pictures. Here his description was elaborate and quite accurate. When asked his age at three different times, his answers were, "18 last August", "15 this August", and "my birthday is in June". In answer to one of the questions of the test he replied, "Do you know my Aunt J—? We'll drive down there some morning. Just put—(giving her address) "I tell you it will be a good thing if I am very hungry in the evening to have a piece of bread and butter." He evidently attends Spiritualistic meetings and talks every little while about the messages that so and so has received, usually ending up with "take good care of me". It is inconceivable to think of any profit being gained either for the child or any one else by having this boy and others of similar type in such a school. In this particular instance, the child is heir to a very large fortune, and the means are ample to have him properly taken care of, either privately or in a public institution. \$100,000 (which is the amount of the heritage) will go to greedy relatives as very little is spent on the boy. Under such circumstances it is not right that the school be burdened with the daily care of the child.

Another singular case was that of a girl who was tested one afternoon when two experimenters were at work at the school. She was tested in the early afternoon by one of the experimenters, and about half an hour after she had finished with the first she was tested by the other (both with the Point Scale). When asked if she recog-

nized any of the tests she did not. In fact the first experimenter came into the room and surprised at seeing her the subject of the second experimenter asked the reason why. The child assured the experimenters that she had not had that test before. The first time she made 40 credits, the second time 51 but the C. M. A. in either case was low enough to class her as feeble-minded.

At the time that the tests were given to the children, lists of the names of the entire number tested were given to the teachers with instructions to fill in, in appropriate columns, the following information or estimates:

- (1) first judgment, what you considered to be the mental status of the child when first he or she came to you. Use terms very bright, bright, normal, backward and feeble-minded where possible;
- (2) final judgment, judgment of the mental status of the child now, after having spent a term or more with you;
- (3) possibilities, i.e., to make progress in the work assigned to him. Did the child take hold and make headway in the tasks, other than schoolwork?
- (4) future, i.e., will the child be able to make his own way in the world, and be able to meet the competition of society? Or will he always have to be cared for and his work directed?

The teachers were instructed to render separate judgments and to not compare notes with the other teachers who were doing the same thing with the lists. Having become familiar with the tests used and the meaning of the terms bright, normal, backward, etc., their use was practically uniform so far as their estimates were concerned. It worked out that each teacher offered judgments on that part of the list which she had most of the time and in only a few cases did the lists overlap. Thus a judgment was received for practically every child tested.

It was a somewhat singular fact that in only six instances did the teacher's estimate of the child's mental ability when first admitted and her final estimate differ. In these six cases all but one changed to what the diagnosis showed the mental ability of the child to be. In 63 of the 111 cases, the teacher's estimate differed from that of the diagnosis resulting from the tests. Twenty-eight of these were too high, 35 were too low. The discrepancies were distributed as follows:

Teachers' Estimate of child	Diagnosis by mental test	Number of cases
Feeble-minded	Backward	10
Feeble-minded	Border	1
Feeble-minded	Normal	4
Feeble-minded	Bright	1
Backward	Feeble-minded	17
Backward	Normal	15
Border	Feeble-minded	1
Normal	Backward	6
Normal	Bright	3
Normal	Very bright	1
Normal	Feeble-minded	2
Bright	Normal	2
		63

On the other hand there were only a very few cases in which the diagnosis did not agree with the report of the progress which the child had made. This point of agreement has been discussed in an earlier paragraph. The significance of these facts, however, should be borne in mind. It means particularly that the possibilities of the child can in some measure be diagnosed by proper testing before the child enters the school. Only a very few of the children had been tested before they came to the school and no use had ever been made of these results so far as the child was concerned. These discrepancies between the teachers' judgments and the results of the mental diagnosis show most clearly the fallacy of an individual's judgment even after some experience and contact with the child. Whether it is worse to judge a child as normal and give him the benefit of the normal group when he is really feeble-minded and will not profit thereby, or to judge a child as feeble-minded and deprive him of the training of the normal children when he merits it, one can not say. Either mistake is serious, and need not be made if a study of the child before he enters the school is provided for. In a school of this sort, in which each child offers a very special problem care should be taken that those entering the school may be the one for whom the work is planned. One of the biggest hindrances in the school room, in the work shop, to the teachers and to the pupils in the presence of those who are mentally misfit for that class or group.

When one reflects that in this same state at the Institution for the Feeble-minded, the cost per capita last year was \$194.39, at the

Boys' Industrial School \$173.87 and at the Girls' Industrial School \$277.35 (and these schools represent comparable groups of individuals in some sense) one must realize the stupendous task of caring for and training this type of individual with the meagre equipment and allowance. The total amount of money expended here at the school, including salaries, etc., was something near \$7420, or about \$57 for each child. It can only mean that the public is not yet aware of the importance and seriousness of the problem of caring for the retarded school children.

CONCLUSION.

As the school is now conducted the children are in the school but six hours each day and opportunity is offered in only a few lines of work. With the co-operation of the school nurse and the principal, information was gained regarding the homes, and the conditions are not good in many cases. The children should, therefore, be kept in the school longer hours and for a greater part of the year, if the most is to be gained by a special school of this sort. Gymnasium provision, recreational halls, larger and better equipped workshops, garden space, more adequate equipment of various kinds will add greatly to the efficiency of the school.

Free and easy relation, established between the medical, dental and educational authorities, should provide a means for determining the general status of the child before he enters the school. In this manner only children who come within the realm of its training will be sent to the school. Those who belong in the industrial homes or the institution for the feeble-minded will be eliminated. Under the present situation the school is in danger of defeating its own ends. Developments must of necessity be slow; perseverance and patience without end is required; but the importance, the necessity and the possibilities of such a school cannot be too strongly emphasized.

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No. 2

REPORT OF PACIFIC COLONY TRUSTEES.

LOS ANGELES, CALIFORNIA,

JANUARY 30, 1919.

On January 25, 1918, the Board of Trustees of the Pacific Colony formally organized in Los Angeles, California. The absence in the east of one member, at the time of appointment of the board of trustees in October, 1917, and the draft exemption board work in which a second member had been called, as before stated, prevented organization prior to that date. This month of January, therefore, marks the first milestone in the Colony's progress, and it gives us very great pleasure to report to you what has been accomplished during the past year.

The first problem which presented itself to the Board of Trustees was the selection of a suitable site for the Institution. The Legislative Committee of 1917, consisting of Mr. Fred C. Nelles, Chairman, Mrs. W. S. James and Messrs. W. E. McVay, Benjamin Pearson, Prescott F. Cogswell and Franklin Booth had visited a number of properties and they rendered to the Board of Trustees a report covering the field of their investigations. The valued assistance of Mr. Nelles, continued during several months, subsequent to the appointment of the Board, is acknowledged with appreciation.

Following the appointment of the trustees the local members thereof thoroughly inspected the properties visited by this committee, and an additional number, and at their organization last January, there were tabulated and considered by them some seventy sites. During the past year inspection of additional properties has been continued making a total of more than 100 sites, in the territory lying between Santa Barbara county on the north, and San Diego county on the south, which have been carefully considered.

In the spring of last year a list was made of from ten to fifteen properties which combined the greatest number of qualifications desirable in a location for the institution.

In May, 1918, the Board of Control granted permission to the Pacific Colony Board of Trustees to expend a sum sufficient to call Dr. George L. Wallace of Wrentham, Massachusetts as expert adviser to the Colony. Dr. Wallace, upon his arrival the latter part of June, after inspection of the sites selected by the board of trustees, chose a property on the Valley Boulevard to Pomona, lying between Walnut and Spadra. The Trustees concurred in the opinion of Dr. Wallace, that this property from a standpoint of lighting, heating and transportation facilities, and in point of distance from Los Angeles and Pomona, would make it a particularly valuable acquisition to the state. In addition, the topography of the property is ideal for placement of buildings and segregation purposes. The acreage, comprising 1326 acres, is priced at \$127,500 or less than \$100 per acre. Dr. Wallace stated that on account of these unexcelled transportation facilities, a saving to the state could be made of 5 per cent on the original building cost, and of approximately \$10 per inmate per year over any other site selected.

Water has been the point in question, and the problems connected with this phase of the situation have consumed months of time and have required a large amount of thought and effort. Under the direction of, the State Engineer wells are now being drilled in the endeavor to find a sufficient supply for the demands of the institution. There is now the possibility of an auxiliary supply from Pomona also, should occasion necessitate.

The contract for this property has been signed by the Board of Trustees, and by the corporate owners, and has the approval of the Board of Control, and of the Attorney General; this contract is contingent upon the development of a sufficient amount of water. The Board feel that the time given to water development on this particular site has been from every standpoint worth while.

During Dr. Wallace's stay of two months, with the cooperation of the State Architect, a complete group plan of the institution for feeble-minded and epileptics was drawn. This plan comprised farm colony buildings, consisting of dormitories, service and farm buildings. The main group is in two divisions, the industrial and school groups, with suitable dormitories; gymnasium, school building, assembly hall, service and industrial buildings, hospital, superintendent's and officers' cottages, laundry, power house, etc.

These have all been planned with a view to the comfort and best care of inmates, combined with economy in upkeep and efficiency in management.

During this last year of the war, building has been prohibited by the federal government and prior to December nothing in the way of housing for inmates could have been accomplished even had it been possible to have acquired the site.

Early in October, plans which had been tentatively formulated for some weeks previous, took definite shape and a survey is now in progress, that of the schools of Santa Monica and Pomona being finished. This survey is being made by the Pacific Colony with the assistance, and under the direction of the department of research of the Whittier State School. It will give information as to the extent of feeble-mindedness in the counties of Southern California with a view to ascertaining the most urgent cases for institutional care. The Board of Trustees has the sanction of the Board of Control in continuing a survey throughout the state of California, if it should deem best to do so.

It is earnestly to be hoped that the next few weeks may see the acquisition to the state of this much desired site.

(signed) Mrs. J. Powers Flint

(signed) Mrs. Dane Coolidge

(signed) Mr. N. W. Thompson

Pacific Colony Board of Trustees.

PERIODICAL LITERATURE.

BAKER, AMOS T.: VAGRANCY. This is a study of 50 cases of inmates of the Westchester County Penitentiary, charged with or showing definite histories of vagrancy. Although vagrancy is an inclusive term it is used here of those who were out of employment and either had no permanent homes or had left their homes for various reasons and were wandering about the country. The number of vagrants in the United States is estimated at 500,000. Need is shown for medical study of the problem of causes of and treatment for vagrancy. 36 per cent are found to be under, and 64 per cent over 40 years of age. Feeble-minded and dementia praecox types of pathological personality predominated in younger groups, deterioration processes among the other cases, but complicated by alcoholism and advancing age. 10 had no education, 14 were barely able to read and write, while 26 had attended school for from three to eight years. 28 confessed to from one to 23 previous prison terms; all this with practically no scientific study of the problem. Among the cases studied are represented the feeble-minded, insane, psychopathic, drug-habituate, chronic alcoholism and senile. Individual studies show high frequency of insanity and abnormal conditions, lack of suitable care and attention to replace punishment and imprisonment. Use the regular institutions for the defectives but provide scientific and socially

reconstructive treatment for the rest.—*Mental Hygiene*, Oct. 1918, pp. 595—604. K. M. C.

BOWERS, PAUL E.: THE PSYCHOLOGY OF THE CRIMINAL UNDER SENTENCE OF DEATH. Mankind has adopted two general remedies to meet the certain ending of this life. One is religion and the other is philosophy. The majority of people seek the assurance of religious beliefs and practices, the minority console themselves with philosophical explanations. The mind of the criminal under the fear of death develops certain defense-reactions, which assist to mitigate the mental pain. In several cases mentioned, it is quite noticeable that the tendency to turn to religion is extremely marked. The individuals are of a more or less primitive mental makeup and are under a situation which is painful and slowly becoming worse as the number of days of life decrease. These unfortunates have to adjust themselves to the stern realities of their fate and supreme efforts are made by them to become reconciled to a hopeless environment. The refuge taken is of an almost fanatical profession of religion, which thereby minimizes their mental anguish. No doubt if this did not take place, a temporary insanity would develop. One cannot say how real their experiences are, but at any rate they served their purpose as a moral narcosis and sedative to make an unendurable state more bearable.—*International Clinics*, Vol. IV, Series 26. pp. 1-10. M. S. C.

WHITE, SOPHIE D.: COURT DECISIONS AFFECTING CHILD LABOR 1902-1914. Seventy-two higher court decisions with reference to the labor of minors are presented in this study. The greatest number related to laws prohibiting the employment of children below a specified age in certain dangerous occupations. A large number involved the question of the general age limit for the employment of children. Other general principles involved were hours of labor, constitutionality of statutes, compensation difficulties, and miscellaneous cases. In most cases, it has been held that "the purpose of the statute is to protect the child from his own thoughtless acts" and the employer is obligated to ascertain the age of the child "at his peril".—*Child Labor Bulletin*, Part I. Feb. 1916. pp. 207-212. W. W. C.

PUBLICATIONS RECEIVED

California. Commission of Immigration and Housing. Report on Fresno's Immigration Problem, with Particular Reference to Educational Facilities and Requirements. March, 1918. pp. 28.

This survey of the immigration problem of Fresno, Calif., was undertaken with the purpose of showing the extent of the problem and the facilities and institutions which the community already has which may be used in carrying out a program of Americanization. The foreign-born population of Fresno consists mostly of Armenians, Russians, Germans, Italians,

Mexicans, Japanese and Chinese, and lesser numbers of other racial groups. Some of the important social agencies dealing with the problem are the city health department, playground commission, county probation office, county welfare commission, Y. M. C. A., Y. W. C. A., library, public schools, and the Americanization Committee, of the Community Welfare League. The report also contains statistical information concerning population, vital statistics, health, poverty and industry as related to the foreign-born population.

Green, E. F. *Reformatory Treatment of the Adult Delinquent*. Read before the section on Sociology, University of Minnesota, April 7, 1916. pp. 10.

Following a brief history of the development of the Minnesota State Reformatory at St. Cloud, Minn., Dr. Green gives a short description of the present equipment and organization of the Reformatory. Discipline is provided by having three grades of inmates and promotion is based on a credit system. Dr. Green states that "a properly equipped school of manual training, where the various trades could be taught . . . would be one of the most potent factors which could be introduced to aid in the reformation of reformable delinquents." It has been found that about 45 per cent of those placed on parole live up to the required conditions, are discharged, and thereafter lead honest and upright lives. When it is known that between 30 and 40 per cent of all cases show mental deficiency, this may be considered remarkable. Crime may result from psychological, physical, and sociological causes. Each criminal should be treated separately, as a distinct and separate case, just as is done in any physical ailment. Our greatest trouble has been that we have treated offenders without proper knowledge of the conditions and the nature of the individual we were striving to help.

Preston School of Industry. *Thirteenth Biennial Report*. Ione, California, 1918. pp. 122.

This admirable and detailed report covers, in the words of Superintendent J. L. Montgomery, "the nature of the human material entrusted to our care, and the methods we have pursued in our endeavor to transform this material into useful citizens." Chapter I includes facts concerning the character and antecedents of 300 boys; Chapter II deals with discipline and organization; Chapter III, education; Chapter IV, social life; Chapter V, parole. The psychological classification accords closely with that of previous reports of this and other institutions: normal intelligence, 7.6 per cent; dull-normal, 28 per cent; borderline, 32.3 per cent; defective, 32 per cent. A comparative table indicates that boys of somewhat lower intelligence are being committed than was true of a similar group in 1916. This suggests that "apparently more care and discrimination are being exercised by the committing authorities and the commitment of a normal boy for a first offense is coming to be a rare occurrence." Economic and other factors are also suggested as causes for the lower intelligence of the entering cases. A direct relation is seen between intelligence and after-success, the percentages of failures being as follows. Normals, 29 per cent; dull-normals, 24 per cent; borderlines, 41 per cent; defectives, 44 per cent.

The report is based chiefly upon research data, the gathering of which has been under the direction of Professor Warner Brown, assisted by Mr. Fred H. Allen. It is comprehensive in scope and merits further analysis and review.

Reed, Anna Y. Newsboy Service. A study in Education and Vocational Guidance. School Efficiency Monographs. With an introduction by George Elliott Howard, Professor of Political Science and Sociology in the University of Nebraska. World Book Company. Yonkers-on-Hudson, New York, 1917. pp. 175.

This monograph is a statistical study of the educational, social, economic, physical, moral, vocational, and avocational aspects of newsboy service in Seattle, Washington. The author furnishes the data which is the basis of her analysis in order that the reader may arrive at his own conclusion concerning its validity. The author is to be commended on the scientific attitude she takes in interpreting the data. By means of such studies as this, we may expect to obtain information which will assist in dealing with the problems of vocational education.

Richmond, Mary E. Social Diagnosis. Russell Sage Foundation, New York, 1917. pp. 511.

Social diagnosis deals with the principals and practice of social case work. The volume is divided into three parts: (I) social evidence; (II) the processes of leading the diagnosis, and (III) variations in the processes. The first section contains a practical discussion of the nature of social evidences and the tests which social experience and the principles of reasoning enable us to apply to it. The second part presents the processes and details of social case work method; these processes are "(1) the first full interview with a client, (2) the early contacts with his immediate family, (3) the search for further insight and for sources of needed co-operation outside his immediate family, (4) the careful weighing in their relation to one another of the separate items of evidence thus gathered and their interpretation." (p.103) The third section contains numerous practical suggestions concerning the diagnosis of various situations caused by the presence of different disabilities. Owing to the wide social experience of the author and the valuable suggestions contained in this volume, it should be carefully examined by all social workers and students of applied sociology.

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THE VALUE OF THE INTELLIGENCE QUOTIENT FOR INDIVIDUAL DIAGNOSIS.

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The intelligence quotient has come into very extensive use because a relative measure, stated in terms of per cents, is thought to express a subject's degree of intelligence deviation better than an absolute measure, stated in terms of years or months of variation from the age norm. Because of the wide-spread use of the intelligence quotient method for purposes of practical mental diagnosis and social classification, particularly with respect to the condition of feeble-mindedness, it is essential that we should carefully consider a number of important questions regarding the intelligence quotient.

First: How shall we interpret the different quotient values and how shall we arrive at our interpretation? Into how many intelligence categories shall we group our intelligence quotients, and how are we to determine upon the number of such categories? Stated otherwise, what quotient values shall we attach to such intelligence categories as supernormal, normal, backward, dull-normal, borderline, feeble-minded, moron, imbecile, etc.? And by means of what objective criteria or signs shall we determine upon these quotient values? Can we be satisfied to classify an individual as normal, or as a genius, a moron or an imbecile if his intelligence quotient, as determined by an intelligence scale, falls at a certain point in an arbitrarily predetermined quotient scale, irrespective of any other considerations? Or shall we first select persons whom from other considerations we seem to be justified in classifying as normal, or as geniuses or morons or imbeciles and then experimentally determine the actual I. Q.'s of large masses of subjects who have been placed in each category?

Second: Will the same I. Q. have a constant value for subjects of different chronological ages until the age of mental maturity is reached, or until the age of 14 or 15, according to one assumption, or until the age of 16, according to the maximal divisor now in constant use for subjects beyond 16? Does mental age retain a constant ratio to chronological age up to the age of mental maturity, or to age 16, or 15, or 14, so that an I. Q. of .50 signifies the same thing for a two or a six-year old as for a 10, 14, or 16-year old? If an I. Q. of .20 indicates idiocy in a five-year old, does it indicate idiocy in a fifteen-year old? If an I. Q. of .70 or less indicates "definite feeble-mindedness" in a six-year old does it indicate the same thing in a 16-year old?

Third: Can the range of the I. Q. values **within** each category be so sharply restricted and the I. Q. range **between** categories be made so definite, that it will be safe to attempt to make differential diagnoses and prognoses of individual subjects on the basis of the I. Q. irrespective of chronological age or of other relevant factors? If not, should we not limit the use of the I. Q. to making comparisons between the intelligence status of groups of subjects of the same distribution of chronological ages and to merely rough diagnoses of individuals?

Fourth, and finally: Does the I. Q. value remain the same, as frequently affirmed, for the same individual throughout the period of his intellectual growth? In other words, can we ever, and if so under what conditions, prognosticate the future intellectual development of an individual purely on the basis of his I. Q. in early childhood?

These questions are easy to propound, but the facts on which to formulate satisfactory replies are as yet very meagre and imperfect.

Stern proposed a scale in which each category was given an arbitrary value of 10 points, and there were no gaps between the categories. The I. Q. range from .81 to .90 was designated "not abnormal." Morons were placed in the range from .71 to .80, and imbeciles from .61 to .70. Stern did not examine any of the subjects whom he so classified, and it is possible that he only attached a theoretical value to the figures given for the categories. He does state, however, that the quotient is only applicable "during that period when the development of the feeble-minded individual is still in progress," which, he states, ceases at the age of nine, while it cannot be applied at

all to idiots. "Once that stage of arrest that we have previously discussed is reached (for morons at the mental age of 9), the quotient obtained by dividing mental by chronological age must decrease."¹ We interpret these statements to mean that the I. Q. cannot be used with mental defectives after the age of 9. Stern evidently places the upper limit of feeble-mindedness at the age of 9, which corresponds with Simon's standards, and more or less roughly with our own².

Terman³ likewise has proposed a decimal scheme of classification in which the range of each category is either 10 of 20 (with one exception) and in which an I. Q. of less than .70 constitutes "definite feeble-mindedness." These steps were probably arbitrarily proposed, as he did not personally examine any of the 982 children from ages 4 to 16-17 who are classified, while the other examiners did not report any appraisal of the examinees' intelligence aside from the intelligence rating. Since the original publication, however, a study has appeared in which a comparison is made between the classification

1. *The Psychological Methods of Testing Intelligence*, 1914, (Whipple trans.), 42, 80.

2. We adhere to the following definitions of feeble-mindedness (moronity):

English Mental Deficiency Act of 1913: The feeble-minded are "persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, but so pronounced that they require care, supervision and control for their own protection or for the protection of others."

Tredgold: "The term mental deficiency" * * * should be restricted to those persons who are so lacking in general mental capacity, in common sense, that they are incapable of subsisting by their own unaided efforts." (*Mental Deficiency*, 1914, 385.) The feeble-minded person is "incapable at maturity of so adapting himself to his environment or to the requirements of the community as to maintain existence independent of external support."

Legal definition adopted in Illinois, 1915: "The words 'feeble-minded' in this act shall be construed to mean any person afflicted with mental defectiveness from birth or from an early age, so pronounced that he is incapable of managing himself and his affairs, or of being taught to do so, and requires supervision, control, and care for his own welfare, or for the welfare of others, or for the welfare of the community, who is not classifiable as an 'insane' person.

3. *The Measurement of Intelligence*, 1916, p. 79.

of the pupils in five quotient groups and their grade progress, and the quality of their school work and intelligence as estimated by the teachers⁴. The correlation between the intelligence quotient and the teachers' estimates of the quality of the school work was only .45 and the teachers' estimates of the intelligence .48, while the disagreements between the intelligence quotients and the grade progress were considerable. The disagreements are largely attributed to the teachers' tendency of "overestimating the intelligence of older, retarded children, and under-estimating the intelligence of the younger, advanced children." While there are some teachers who are subject to just the opposite tendency, this explanation does not take account of the fact which we have frequently found in examining retarded school children, that there may be found a discrepancy between a child's pedagogical status and intelligence status which is due neither to incorrect placement in grade nor incorrect estimate of intelligence, but to specific intellectual defects which interfere with the successful pursuit of the school tasks. Terman assumes that the I. Q. is valid up to the age of 16, at which point he says that the growth of intelligence ceases or slows down so rapidly that it practically ceases, although the Stanford scale provides tests for age XVIII. He affirms that the I. Q. remains constant for any given child, and therefore serves as a reliable basis for making prognoses. The I. Q.'s have not yet been secured, however, for the same children throughout the period of growth, so that we do not know to what extent this may be true, or to what extent they may be rhythms in the curve of mental growth and how the rhythms differ with individuals, or to what extent the I. Q.'s of childhood will correlate with the proved achievements of adulthood. Until we have more information on these matters we must make prognoses looking into the distant future with great reserve, except in obvious cases.

The writer has already analyzed the I. Q.'s based on the 1908 and 1911 scales for two blocks of consecutive cases examined between 1912 and 1915⁵. In this analysis we showed the average I. Q. for each intelligence category, the range of distribution of I. Q.'s within each

4. The Stanford Revision and Extension of the Binet-Simon Scale for Measuring Intelligence, 1917.

5. Problems of Subnormality, 1917, pp. 178, 179, 180, 189, 190, 264.

category, and the relation of the average chronological age for the subjects in each intelligence category to the size of the I. Q.'s. We shall here present parallel data based on the Stanford revision for a block of 411 consecutive children ranging from 5 to 19 years of age, with an average of 1.08, which were examined in St. Louis during last year. The psychological examinations and diagnoses of all of these children, as well as of those in our earlier studies, were made by the writer, while the medical examinations were made by the inspectors of hygiene who also assisted the nurses and teaching staff in the gathering of the data on the personal and family history and on the environmental conditions. The teaching staff gathered the school data, which were sometimes supplemented by educational tests given in the clinic. In classifying a child all the facts which had been thus secured were properly weighed, in the belief that more accurate diagnoses could be reached by considering all the facts than by merely considering the Binet-Simon rating, or the results of formal psychological tests. In most cases, the factors given the greatest weight in the mental diagnosis were probably the pedagogical and mental status. The absolute amount of mental retardation by the Binet-Simon scale, whether using the old versions or the Stanford version, was always ascertained before a diagnosis was made, but in no case was the I. Q. computed before the classification was made, nor have we consciously had any I. Q. standards in mind when making the diagnosis. In many cases we have been able to check our classification by the child's subsequent school record. We receive annually an elaborate report on all the children assigned to our special schools, but we do not receive reports regularly on children recommended to other classes. Children not assigned to special classes who fail to make reasonable progress are reported to the clinic for reexamination. (The result of these reexaminations will be given in future). The most satisfactory method of checking up our diagnoses would be to reexamine all the children after a period of say, five, ten, or fifteen years. We should then be able to correct by means of both the psychological tests and the child's subsequent educational and social records, any errors committed in diagnosis. In the absence of these checks, we have to rely on the assumption that the classifications are fairly accurate, that the errors made have been both positive and negative (and this we have

found to be true), and that they will at least partly balance one another⁶.

In our earlier analysis we found that the I. Q.'s were lower with the 1911 scale than with the 1908 scale in every classification, the differences varying from three to six points. The lower values in the 1911 scale were evidently due to the greater difficulty of the 1911 scale, which we found to be true in the majority of the records of 840 consecutive cases tested by both scales which we have analyzed⁷. Analyzing the data in Table I, we find that the Stanford I. Q. values are lower than they are in the 1908 scale in every category in one block of cases, but only in half of the categories in the second group, while they are lower in only two categories in the 1911 scale, higher in four and equal in one⁸. The differences between the Stanford I. Q.'s and the 1911 I. Q.'s, however, are insignificant. They amount to only one point, except in one category (we are not including the idiots, as only one case is included). This caused us some surprise as we have found that the Stanford scale grades lower than the old scales. We had expected that the Stanford I. Q.'s would average uniformly lower.

The I. Q.'s are sometimes the same for the boys and the girls, sometimes lower for the boys and sometimes lower for the girls, but in no category in which there are enough cases to justify comparison are the differences of any moment.

There is a gradual and consistent increase in the I. Q. values with each ascending intelligence category, but the size of the steps is not absolutely uniform. The difference between most of the categories is somewhere in the neighborhood of ten points, and this is true in both of the old scales as well as in the Stanford scale. The largest difference in all the scales is between the imbeciles and the morons, amounting to between 16 and 19 points in the old scales and 14 points in the Stanford scale (the idiots cannot be compared).

6. Most of the changes made in our diagnoses of reexamined cases have been to lower classifications, but this may be of no special significance as only the pupils who have failed to make adequate progress have been reexamined.

7. A further comparison of Scattering and of the Mental Rating by the 1908 and the 1911 Binet-Simon Scales, *Journal of Delinquency*, 1918, 16 ff.

8. The "borderline and feeble-minded" category here corresponds with our earlier "borderline" category.

It is difficult satisfactorily to compare our I. Q. values with the values which have been proposed by others who have employed the Stanford revision, both because of the different interpretation which may be given to the different categories employed and because other writers have not given an average I. Q. value for each category but the I. Q. range. It is probable, however, that all of our major categories correspond with Terman's except our "backward" category which comes between our "retarded" and "borderline", for which he has furnished no equivalent. In the following tabulation we have placed opposite each other the categories which seem to be equivalent in the two classifications, while we have also added the categories we have used which are not contained in Terman's scheme. Terman has not supplied any average I. Q. value. We have taken the mean of his range as the average value in each category. For our own categories we give the average and median I. Q. (we shall, however, only refer to the averages as the differences are insignificant where the cases are sufficiently numerous to justify comparison), the lowest and the highest I. Q. in each category, referred to as the "Extreme I. Q. Range"; the I. Q. range after 25 per cent of the extreme I. Q.'s (i. e., the smallest and largest) have been excluded, and the I. Q. range after 50 per cent of the extreme I. Q.'s have been excluded (i. e., the range of the middle 50 per cent). We shall call attention to a few of the more important facts.

The averages for the normals and morons are practically the same in the two classifications, but our imbeciles average eleven points higher, our borderline three points lower, while Terman's "dull" subjects fall midway between our "retarded" and "backward".

Although there is a fair degree of correspondence between the average I. Q.'s in most of the categories, the range between the highest and lowest I. Q. in each category differs considerably. The range is .10 for Terman's "dull" compared with .17 for our "retarded"; for the borderline his range is .10 compared with our .28; for the morons his range is .20 compared with our .22; and for the imbeciles his range is .30 compared with our .44. Of course, our range is considerably less if we exclude the extreme I. Q.'s. Thus if we eliminate 25 per cent of the most extreme I. Q.'s our ranges are as follows: retarded, .8; backward, .13; borderline (and potential feeble-minded), .13; potential feeble-minded, .10; morons, .13; potential morons, .14; and im-

TABLE I
CHRONOLOGICAL AND STANFORD BINET-SIMON AGES, INTELLIGENCE QUOTIENTS AND
RETARDATION OF 411 CONSECUTIVE ST. LOUIS CASES

Category	No. of Subjects		Chronological Ages		Stanford Ages		Retardation in years		Intelligence Quotients	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Normal	5	0	8.78	.....	8.56	.....	.22	.....	.99	.....
Retarded	15	3	10.99	10.30	9.99	9.44	.87	.86	.90	.90
Backward	57	8	11.19	10.99	9.15	8.73	2.18	2.26	.80	.79
Borderline	76	24	11.10	10.80	8.09	7.50	2.99	3.22	.72	.69
Pot. Feeble-Minded	44	20	9.75	10.22	6.56	6.78	3.18	3.33	.66	.66
Bor'line and Pot. F.-M.	120	44	10.61	10.49	5.01	6.71	2.87	3.13	.73	.67
Diagnosis Deferred	7	3	7.90	9.85	7.53	7.17	3.06	3.27	.70	.68
Morons	42	21	12.22	12.16	7.54	7.06	4.67	5.09	.60	.60
Potential Morons	15	18	10.91	10.46	6.41	6.00	4.46	4.46	.59	.57
Imbs. and Pot. Morons	49	36	10.65	11.09	5.15	5.55	5.41	5.26	.50	.53
Imbeciles	34	18	10.54	11.72	4.57	5.09	5.83	6.06	.46	.46
Idiots	0	1	.....	12.25	.....	2.16	.....	10.16	.....	.17
Average chronological age of boys, 10.88; of girls, 10.90; and of boys and girls, 10.89 years. Distribution of ages:										
Ages	5	5	6	7	8	9	10	11	12	13
Boys	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Girls	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Both	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

The borderline category includes cases some of which remain on the borderline, some of which eventually prove to be merely backward while others eventually prove to be feeble-minded. In the case of the "potential feeble-minded" there is a strong probability that the subject will eventually prove to be feeble-minded. "Potential morons" include subjects who test as imbeciles at the time of the examination, but who will probably reach the status of the moron eventually. No intelligence diagnosis was ventured in the case of the "deferred" for one reason or another.

beciles, .27. If we eliminate 50 per cent of our extreme I. Q.'s the ranges are, of course, still further reduced. The figures are as follows: retarded, .3; backward, .8; borderline (and potential feeble-minded), .7; potential feeble-minded, .4; morons, .8; potential morons, .6; and imbeciles, .14.

While there is considerable I. Q. range in Terman's categories, there is no overlapping. The "dull" category extends from .80 to .90, the borderline from .70 to .80, the morons from .50 to .70, the imbeciles from .20 or .25 to .50, the idiots below .20 or .25, while below .70 is "definite feeble-mindedness." On the other hand, detailed analysis shows that there is complete overlapping between all of our adjacent categories and sometimes between several adjacent categories when all the cases are included, and overlapping between all the adjacent categories when 25 per cent of the extreme I. Q.'s are eliminated. Of course, in the latter case the overlapping is much less extensive. Only when we eliminate 50 per cent of the extreme I. Q.'s do we find gaps between the categories. In this case there is no overlapping between a single adjacent major category. This condition can be artificially produced in a conventional classification, but it probably does not exist in nature. In nature there are no sharp lines of demarcation or gaps between different mental categories or classifications. They all shade into each other imperceptibly and overlap. The overlapping of the I. Q.'s of different categories is not peculiar to the Stanford revision. We found precisely the same condition to obtain in two blocks of cases which were examined between 1912 and 1915 by the 1908 and 1911 scales, which we have already analyzed⁹, while Pearson and Jaederholm have called attention to a similar result¹⁰.

But why is the overlapping as large as we have found it to be? We advanced an explanation in our earlier discussion, but there was a question about its correctness because of the imperfections of the old Binet-Simon scales. The opinion was generally accepted that they were too easy in the lower ages and too difficult in the upper ages. Therefore the wide range which we found in the I. Q.'s might have been due to the imperfections in the scales themselves. But the figures

9. Problems of Subnormality, 1917, p. 179 ff. and 190.

10. Mendelism and the Problem of Mental Defect, II. On the Continuity of Mental Defect, 1914, p. 17.

in Table III show that the Stanford scale gives exactly the same scattering and overlapping of I. Q.'s in the different categories that the older scales gave, so that the conclusion follows either that the Stanford scale may also be imperfect or that the explanation which we gave may be the correct one¹¹.

Suppose that we distribute the I. Q.'s in groups as we have done in Table III: .21 to .27; .30 to .34; .35 to .39; .40 to .44; .45 to .49, etc.; and then find the average chronological age of all the subjects included in each I. Q. group when classified according to the intelligence diagnosis, such as imbeciles, morons, borderline, backward, etc. A comparison of the average chronological ages in each intelligence category when thus arranged will show that to be true, that as we proceed from the group having the lowest I. Q. value to the group having the highest I. Q. value (i. e., from I. Q. .21 up through all the groups to 1.08) the average chronological age tends gradually to fall. Thus the average chronological age of the imbeciles in the I. Q. group from .21 to .27 is 13.98; then there is a gradual, although irregular, decrease in the chronological age until we reach the last I. Q. group, .65 to .69, when it is only 8.20. For the morons the average chronological age for the .45 to .49 I. Q. group is 12.91, but when we have reached the .70 to .74 I. Q. group, it is only 9.0. This decrease of the chronological age with increasing I. Q. obtains in every intelligence category, but not without exceptions. They are fifteen exceptions out of a total of 53 possible comparisons. But they are no more frequent with the Stanford than with the older scales. Moreover, they are frequently so small as to be unimportant, and had there been more cases they would probably have been less numerous.

The decrease of the chronological age irrespective of the particular ages involved has occurred with the increase in the size of the intelligence quotient with all the groups of subjects whom we have examined, the vast majority of whom have been feeble-minded or more or less subnormal and who have almost always been less than 20 years of age. The rule that the higher the chronological age the lower the quotient holds for the younger as well as the older chronological ages. It holds even though we arbitrarily choose age 15 or 16 as the divisors in computing the quotient for ages above 15 or 16. If the rule applied

11. Problems of Subnormality, p. 266 ff.

only to feeble-minded and backward children the explanation suggested would be that these pupils fall more and more behind intellectually as they grow older, hence the I. Q. must of necessity gradually fall. But we have found the rule to apply to our subjects who are merely retarded, or who are normal or bright. We come back therefore to the explanation which we have previously suggested, namely that "While the differences between each successive chronological age is a constant difference (exactly one year), the difference between each successive mental age gradually (although not regularly) diminishes until it becomes imperceptible toward the period of mental maturity¹²." At what point this slackening in mental growth begins and at what point it reaches its height, we cannot now say. But the result of the progress of slackening is that whereas the difference between each successive chronological age is constant the difference between each successive mental age diminishes, the necessary consequence of which would seem to be that the I. Q. exaggerates the mental retardation of youths and adults as compared with children. Therefore if we apply the same I. Q. standards of intelligence diagnosis to youths and adults as to children we should find an exaggerated number of feeble-minded, borderline, or dull normals among the former. We believe that this is one explanation of why so many more feeble-minded and subnormal cases have been found among adolescents than among preadolescents. Thus comparative studies by the Binet tests of groups of delinquent, dependent and public school children, have shown that there are more feeble-minded among the delinquent than among the dependent, and more among the dependent than among the public school children, and the preponderance has been expressed in exact ratios based upon the intelligence quotient. We are not now interested in this question from the point of view of objective fact, but merely from the point of view of the logical postulate involved. The postulate is that the I. Q.'s mean the same thing for any chronological age, at least to age 16. But our results strongly suggest that conclusions between groups based upon a comparison of intelligence quotients are logically unwarranted unless the distribution of chronological ages is approximately similar in the different groups. In point of fact, the average chronological ages have usually been quite different in the different groups compared. The

12. As before, p. 268.

average age of the delinquents tested has been greater than the average age of the "normal" public school children with whom they have been compared. If our results are correct it follows that the percentage of mental deficiency found in these groups of adolescent and adult delinquents has been too large, in so far as it has been based on the intelligence quotient standards established or posited for younger children.

To sum up, then: If we are to use the intelligence quotient to compare subjects of different chronological ages, indeed if we are to use it at all for individual diagnosis, must we not work out a corrective formula which will remove the difficulty which arises from the fact that while a year's increase in chronological age always is a constant quantity—365 days—a year's increase in mental growth is a gradually diminishing variant? The formula should compensate for the "natural slackening in the rate of normal mental growth"¹³, and it should be applicable until the period of mental maturity has been reached. Although this has been placed at 15 or 16, it is wisest to say that we do not know when growth ceases. Tests have shown very clearly that small increments occur in many mental traits to the end of the teens or even beyond.

It may be said in reply that no corrective formula is needed because the tests have been empirically standardized for each age, and therefore already compensate the law of diminishing mental growth. Moreover, the I. Q. is itself a device for making the compensation. Thus if we assume that the four mental years from 12 to 16 represent a smaller difference than the four mental years from 6 to 10, this fact is adequately expressed by the difference in the I. Q., which is 75 in the former case, or a retardation of 25 per cent, and 60 in the latter case, or a retardation of 40 per cent. Although this seems to be mathematically correct, yet we find experimentally in all the classifications of our subjects a tendency of the I. Q. to fall as the chronological age rises, or a tendency of the I. Q. to increase as the chronological age decreases.

Possibly there is some other explanation of this phenomenon than the one we have offered. But whether or not our explanation is correct, we feel that too great reliance must not be placed on the intelligence quotient for differential intelligence diagnosis, for the following reasons:

13. As before, 269.

First, because each intelligence category covers a considerable range of ability, or, in other words, a considerable number of I. Q.'s. To make the range arbitrarily extend over .10, .15 or .20 I. Q. points may not be objectionable for the purpose of theoretical classification, but is too rigid to be safely applied in practical diagnosis, owing to the widely different factors which must be considered in dealing with individual cases. Moreover, even those who have provided such rigid limitations have allowed considerable range to each category.

Second, because no sharp line can be drawn between the different intelligence categories, except in theory. In nature the categories are not distinct entities or divisions, set off sharply from each other, but they merge or overlap.

Third, because we do find in point of fact, that the I. Q.'s in different intelligence categories overlap, sometimes very considerably. This overlapping is sometimes due to differences in the chronological ages of the examinees, and sometimes to the different physical, developmental, social, racial and psychological complications surrounding each case, which must be considered in making a diagnosis. Because of this a different classification will sometimes have to be assigned to two subjects with the same I. Q.

Four, we cannot classify an individual by his I. Q. irrespective of his intelligence level, present or potential. A 50 per cent I. Q. for a 4-year old would mean an idiot, for an 8-year old an imbecile, and for a 16-year old a moron. One of our subjects at 16.8 had a quotient of .49 and might thus be classed as an imbecile, but he had a Binet age of 8.4, and follow-up work during several years had shown that he could not be classed lower than a moron. One of our subjects at 9.66 had a B.-S. age of 6.4, and an I. Q. of .66, and should thus be classed as a moron. He was diagnosed as an imbecile, and this diagnosis has been confirmed. He has made practically no progress in school during two and a half years. On the other hand, one subject at 15.3 had a Binet age of 10.2 and thus exactly the same I. Q., namely .66. He was diagnosed as borderline or very backward. We have followed his industrial career now for two years. During this time he has held the same position and is now receiving \$17.00 a week. The pay is abnormally high because of war conditions, but he has made good and probably cannot be rated lower than borderline. The same

practical difficulties would probably affect the I. Q. on the plus side of the curve.

Finally, the specific generalization that an I. Q. of less than .70 signifies "definite feeble-mindedness" cannot be accepted without reservations. It will all depend on the age of the individual, upon the attendant physical and psychic complications, and especially on whether or not the deficiency is due to a brain defect which dates from birth or early life. There are no doubt different racial levels of intelligence which we must recognize in intelligence diagnosis. From the fact that we would have to class an I. Q. of .65 in an American as feeble-mindedness if the mental deficiency is due to arrested or defective brain growth from early life, it does not necessarily follow that we must classify an I. Q. of .65 based on an American intelligence scale, in a Mexican, or Indian, or Negro, or Patagonian as feeble-mindedness unless the low mental status is due to the same cause, namely arrested or defective brain development from early life. If the low I. Q. merely represents a lower racial level we can scarcely designate the condition as feeble-mindedness, in the generally accepted pathological and social connotation and legal definition of that term. The term feeble-mindedness is restricted, and properly so, to a condition of social and vocational inefficiency due to mental deficiency which is dependent upon a brain arrest or defect dating from birth or early life, as shown in the definitions cited in footnote 2 of this article.¹⁴

¹⁴The following article, which has appeared since this paper was submitted for publication, is in harmony with the writer's conclusions: Florence Mateer, *The Diagnostic Fallibility of Intelligence Ratios*, Pedagogical Seminary, 1918, p. 367.

SOCIAL INVESTIGATIONS IN DELINQUENCY¹

DR. LILBURN MERRIL

Diagnostician, Seattle Juvenile Court

A delinquency hearing in the children's court usually presents an anomalous situation with both the judge and child at a disadvantage. The child's consciousness of his dilemma, his hours of anxious waiting, and the stultifying influence of being the center of interest in a room full of curious spectators ordinarily so distorts his manner as to obscure his real self. A child's emotional and intellectual reactions in such a situation seldom are dependable, and the trenchant moralizing of the court is apt to be unheeded because of the child's unstable mood, or sullenly accepted as a perfunctory recital of platitudes.

The receptivity of the child, however, is not the essential element of a satisfactory court hearing. The all-important considera-

ERRATA:

p. 125, line 2; Merrill should be Merril.

p. 127, running head; Demobilization and the Crime Rate should be Social Investigations in Delinquency.

an investigation of his family and community relationship is contemplated by all satisfactory juvenile court laws as a part of the responsibility of the probation officer. And it appears to be a self evident fact that the execution of such an inquiry is the most important responsibility devolving upon any agent of the court.

At the outset it should be understood that whatever study of a child is made preliminary to a court hearing shall be for the immediate assistance of the judge. The information secured may have important academic interest, and the findings may be recorded for statistical purposes; but always the investigator should keep in mind the fact that he is serving as an assistant to the judge for the assembling of facts

1. From an address before a conference of Washington probation officers.

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The receptivity of the child, however, is not the essential element of a satisfactory court hearing. The all-important consideration is that the judge shall be familiarized with the real condition of the child. This result cannot be obtained by the unsystematic talk which sometimes jeopardizes the poise of the magistrate who sits in an open court confronted by the faithful and zealous champions of the community's youth. And as much may be said of many private hearings. A court proceeding conducted by an ever so discerning judge under the most favorable conditions of privacy and friendly informality cannot be sufficient for the survey of a child's nature and relationships.

In recognition of this fact a preliminary study of the child and an investigation of his family and community relationship is contemplated by all satisfactory juvenile court laws as a part of the responsibility of the probation officer. And it appears to be a self evident fact that the execution of such an inquiry is the most important responsibility devolving upon any agent of the court.

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which shall enable the court to know the nature of the child, his social history and the faults of his environment; a collection of data which shall reveal the influences responsible for the irregular behavior.

Proficiency in this difficult task demands keen faculties of observation, tact, a sympathetic understanding of child-nature, which should be well grounded in an active recollection of one's own childhood, and trained judgment capable of classifying causes and effects. Much of this ability should be a native endowment, but to rely entirely upon a natural gift for this work would be as amateurish as is the bungling effort of a spectacle peddler to fit out a pair of seriously deformed eyes from a sample case of lenses. The investigator should read the literature that deals with the subject of delinquency and its causation. If he have less than the attitude of a student he cannot hope to be efficient and his shortcoming will leave him far removed from the sphere of trustworthy diagnosis.

The first interviews should generally be among the school authorities. Their record of the child's citizenship, industry, attendance and scholarship will usually provide a dependable summary of his disposition and social attitude. All interviews with school teachers and principals should be confidential, and careful notice should be taken of the child's status in and about the school for as long a time back as information is available. I earnestly would commend fraternal contact with the school authorities.

Following the school inquiry the attention should be directed to the child's life at large in the community. His industry or indolence, companionship, night life, a tendency to excessive disorderliness or dishonesty, and any previous arrests, are all factors of real importance and should be investigated with painstaking care.

This inquiry will require tact. Don't herald the fact that an investigation is under way, but quietly glean your information without contributing to the small talk of the neighborhood. Anything worthy of your notice will crop out on the social landscape with sufficient prominence to fall within the vision of a good observer.

Having secured from the school and community a more or less sketchy, but accurate, outline of the child's reputation, the investigator should next turn to the family. Here he shall require much fortitude, a discreetly restrained tongue and many graces. At the threshold his sincerity of purpose and kindness of manner should

gain for him a welcome as their child's friend. For, in truth, is he not that? What other motive should actuate an agent of the children's court than one of devotion to the welfare of the child. And yet we are in need of daily self-examination lest the constant contact we have with offenders shall subtly alter our viewpoint and cause us to see the child in a perspective relation to his offence.

I do not mean to favor a sentimental disregard of the child's wrongdoing, nor the need of holding him to a just accountability for his acts; but I do maintain that the soul of the child is the factor of deep importance to the court. If the investigator has not this point of view he may not hope to gain the family's confidence.

For the attainment of his purpose he should discreetly avoid officious manners and blustering haste. Let him cultivate the art of allaying fear, and by a graciousness of manner and unaffected kindness inspire the household with confidence. This I advise, not deceptively but in accordance with genuine sincerity of interest in the child whose welfare he is endeavoring to conserve. The emotional distress he sometimes shall have to dispell in interviewing parents will sorely tax both his patience and fortitude, but it is so desirable to avoid prejudice and to deal in co-operation with the members of a family that the investigator ought to possess his spirit in peace and think a great deal of Emerson's trite line that "As much soul as we have avails."

I make no apology for thus spiritualizing the scientific work of analyzing human nature. The emotional barrier that withholds men from a knowledge of their fellows is composed of fear and distrust; and never a revealing insight to the heart of a child or man may be had until fear is dispelled by faith and confidence. There is no alternative inroad. Brutal bluffing and clever questioning may gain confession of guilt, but the secret aspirations and weaknesses in the background of the soul are not revealed except in response to the appeal of a sincere personality. The investigator cannot satisfactorily know the child or his parents until he shall have gained some insight into their soul qualities. To this end it is desirable that he shall be mindful of the important fact that the children's court is ideally a spiritual force. If its agents fail to understand these fundamental facts their service will lack the soulful element which is indispensable when trying to help folks who are in trouble.

This little preachment ought then to leave the coast clear for an affable, heart-to-heart talk with members of the family, and it should also give you the secret of how to gain the child's confidence.

The information obtained from family members should provide a clear picture of the child's developmental history; and whether the investigation shall include little or much of the social, physical or mental aspects of character development will depend upon the investigator. His attitude must be sympathetic; but a requisite of almost equal importance is a systematic method of analysis. The qualities of the heart must gain entrance for the analytical power of his mind. He must see all the way around the child and through him. This cannot be done except by the scientific method. I know the import of this fact. Sometimes it serves as a text for shallow criticism, and we are told that common sense is perverted when a delinquent is measured with a "yardstick". Probably so. But the use of so absurd a figure merely emphasizes the fact that court officials sometimes are in need of cultivating orderly habits of thought and expression. A delinquent child is apt to be a complex quantity and the least that common sense can ask in his behalf is that the officials who are entrusted with his care shall study him with both heart and intelligence.

No collection of data should be considered satisfactory unless they reveal the reasons for the child's irregular conduct. Though there is implanted within us all a trace of devilishness which has no need of being coaxed, children do not habitually go in evil ways without some special, inciting influence or complex being at fault. Much misconduct has its origin in obscure mental and physical pathology. Zealous imagination that some pernicious somatic or mental influence is stealthily damaging every child whose naughtiness has troubled the public conscience, in vain foolishness, to be sure. But when human nature is kinked by some sort of physical or mental ailment, no effective work of correction can be done until we find out what is wrong.

In all regards adhere rigidly to facts. If inferences are made, acknowledge them as such. Finally, in faithful and conscientious consideration for the judge, remove from your thought (if it be possible) all that you know of the child, and read your report as original information. If it enables you to know what is wrong with the child and its environment, and is written in grammatical form, you shall have satisfactorily completed your task.

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Vol. IV.

May 1919

No. 3

PERIODICAL LITERATURE

AVERILL, LAWRENCE A: THE MOTION PICTURE AND CHILD-DEVELOPMENT. Somewhat recently there has arisen throughout the country a desire not alone for educational films but for a more clean and harmless film for boys and girls.

The Board's Committee on Films has recently issued a pamphlet entitled, Principles governing the selection of motion pictures for young people under sixteen. A few of the objectionable things mentioned which should be left out of the films are: Sex and crime scenes, drug fiends, hangings, perverts, insane and feeble-minded individuals. The use of weapons should not be exploited. Cruelty to animals or insects should not be countenanced. Drinking and underworld scenes should be discountenanced. One solution would be a special children's performance at which suitable pictures are selected by one familiar with juvenile psychology. It is through the channels of a real warm living imagination that the motion picture makes its appeal to young children. The child's mind is selective and they are quick to note details and later consider them. Since ideas throng upon them, and since the trivial, the secondary, and the implied possess them to the exclusion of the main theme or story, it is essential to analyze moving pictures in detail as well as a whole. Yet the problem is far from solved. With regular weekly performances for juveniles there will still be children scattered through the audience of most moving picture houses after the day school session is over.

Probably the ultimate stamp of approval of a film will have to be with the parents in the home and it will be their duty to assure themselves of the qualities of the program.—*Educational Review*, IV; May, 1918, pp. 398-409. M. S. C.

BOWERS, PAUL E.: THE CRIMINAL INSANE AND INSANE CRIMINALS. The first great principal regarding the criminally insane is that of self preservation. The second is for a hospital wherein they may be suitably cared for. The ordinary hospital for the insane is inadequate to insure public safety. With few exceptions our criminal courts are more concerned with the infliction of penalties than with the cause of the crime. Most of the causes of mental alienation which leads to crime come under one of three headings: (1) The epileptic, who often during a post or pre-epileptic automatic state will commit some overt act. When he regains his mental status there is apt to be no memory of the acts he may have committed during such a period. An epileptic may commit such crimes as murder and sex crimes. A psychic epileptic may commit all manner of crimes, theft, arson, rape, assaults and homicides; (2) Paranoia and allied paranoid states represent a large quota of crimes. People with this type of insanity are particularly dangerous as they will often appear to be intellectually normal and yet harbor in their diseased mentality systemized delusion of persecutions. Homicide, homicidal attempts, assault and battery, blackmail, perjury, impersonation of officers and sexual crimes are committed by them. (3) Feeble-mindedness is the greatest causative mental factor. The feeble-minded, devoid of all normal critique, commit all manner of sexual crimes. They are thieves, articles of small worth appeal to them. They frequently set fire to buildings. The following classes should be confined in hospitals for the criminally insane. The prisoner who becomes insane while serving sentence in prison, the insane who commit dangerous acts and are found insane at the time of trial, those persons who commit crimes while insane, but are found sane at the time of trial and in whom there is a probability of a current attack of insanity, dangerous patients of the ordinary insane hospital, and the born criminal. About 10 per cent of the prison population is insane and therefore when really mentally sick carry the stigmata of a criminal. The mental diseases of insane criminal and criminal insane are generally of a chronic, degenerative type, and for this reason the number of recoveries is very much smaller than ordinary hospitals for the insane.—*American Journal of Insanity*, LXXIV 1, July 1917. M. S. C.

FALCONER, MARTHA P.: THE PART OF THE REFORMATORY INSTITUTION IN ELIMINATION OF PROSTITUTION. Upon the organization of our military camp, fort, post, and cantonment, there developed the necessity of suppressing the houses of ill fame or segregated districts which were apt to become a menace to our army. Any person or corporation found receiving or permitting for immoral purposes a person into any place or building within a certain radius of the camp was given a sentence of one year or a fine of \$1000. The ideal situation for each camp community

was to have suitable detention facilities for girls and women where they could be held for medical and physical tests, pending trial; to have hospital facilities for use when necessary, and to have available a reformatory institution for long term commitment. While the existence of a reformatory will serve as a deterrent to potential prostitutes, yet modern reformatories should have no qualities repugnant to the individual,—worker, visitor or inmate. Girls should be sent to our industrial school for the remainder of their minority and the women to the reformatory. In both cases parole under probation should be extended. The time in the institutions, should be spent in academic and industrial work. The community spirit must be developed, student government established. The work must be of real value evident to the worker. The general public should realize and take up the War Department's program to eliminate prostitution.—*Social Hygiene*, V-1, Jan. 1919, pp. 1-9. M. S. C.

FRENCH, ALLISON T.: THE NEED FOR INDUSTRIAL HOMES FOR WOMEN. Efficiency, the watchword of the past few years now demands the elimination of prostitution. That prostitution must go is undeniable, but the means is the next consideration and one equally important with any law decreeing prostitution illegal. An outlet must be provided for the women of this group who, their means of livelihood gone, will find that their mental, moral and physical equipment makes them unfitted for any other occupation. For this group curative treatment and re-education along vocational lines in a state industrial home must be provided. A comprehensive study of the monetary cost will show this prophylactic measure to be more economical than our present one of caring for the results of prostitution and venereal disease.—*Social Hygiene*, V-I, Jan, 1919, E. K. B.

NICE, MARGARET MORSE: AMBIDEXTERITY AND DELAYED SPEECH DEVELOPMENT. A larger number of speech defects is found among left-handed persons who are forced to change to the dextral hand. Among the dextro-sinistral children of school age there is about 17% of stammerers. In most cases there is a tendency to late speech development and until the use of one hand or the other predominates the child is either late or irregular in his speech development. He will show a limited vocabulary, stumble over familiar words, stutter and when excited become almost incoherent in his speech. In each case the parents testify that the children are as intelligent as other children of their age despite their lack of loquacity. It is well known that there is an intimate association between the hand center and speech center of the brain, normally the speech center is located in the dominate side of the brain. An explanation of the coincident of relation in speech and in the ascendancy of the right hand might be that as long as the dominate hand center was not definitely settled the speech center could not be located.—*Pedagogical Seminary*, XXV, June 1918, pp. 141-162. M. S. C.

WALKER, NATHANIEL J.: MOTHER'S PENSIONS IN RELATION TO JUVENILE DELINQUENCY. Very few children of pensioned widows are brought into the courts of New York State charged with truancy,

delinquency, or improper guardianship. This statement is based on reports of Boards of Child Welfare which administer the Widow's Pension Law. The secretaries of these boards believe that very little dependency is produced when the pensions are carefully administered. Mothers should not be deprived of their children because of the death or absence of the father, provided they are otherwise capable of caring for them. Destitution alone should not be the means of separating the children from their mothers. In innumerable cases of juvenile delinquency, if the mother had not been compelled to become the bread winner because of the death, desertion, or imprisonment of the father, and had been allowed to remain in the house and give the children ordinary care and supervision, the children would not have found their way into the children's courts.—*National Humane Review*, VIII, Jan. 1919. pp. 6, 7, 18. W. W. C.

PUBLICATIONS RECEIVED

Beck, Frank Orman: *The Italian in Chicago*, Bulletin of the Department of Public Welfare, City of Chicago, Vol. II, No. 3, February 1919, pp. 32. This survey of a city problem in nationality considers the Italian population in Chicago from several points of view including local distribution, occupation and industry, economic life, housing and hygiene, educational status, social interests, artistic sense, and moral and religious beliefs. In view of the facts outlined, or as the writer terms it, the diagnosis, a series of sixteen recommendations are presented which are particularly adapted to the problem in hand but which also are of such a nature that any city or community might well apply them to their total population. The putting into effect of such recommendations would be a distinct step in social improvement, prevention of crime, and civic betterment.

Long Beach Social Welfare Bureau. *Bulletin on Social Welfare Work in the City of Long Beach, California. First Annual Report of the Long Beach Social Welfare Bureau.* February 1919.

This bulletin presents a brief analysis of the working plan of the Social Welfare Bureau in the city of Long Beach, California. It illustrates the possibilities of cooperative effort on the part of private and public social agencies.

Ohio Seventh Annual Report of the Board of Administration, for the fiscal year ending June 1918, to the Governor of the State of Ohio. Press Ohio State Reformatory, Mansfield, Ohio, 1918.

This report contains a brief account (17 pages) of the economic problems and future plans of administering the state institutions of Ohio, while a large amount of statistical data is given concerning the expenditures, products and social, industrial and chronological history of inmates of the various institutions. The property in the custody of the Board is valued

at over \$27,000,000 and the 20 institutions had a total average daily population of 23,235 for 1918. Of particular interest to students of social problems is the description of the plans for the Ohio Bureau of Juvenile Research of which Dr. Henry H. Goddard is director.

The Otis Group Intelligence Scale. Manual, sample test sheets, and other material. World Book Co., N. Y., 1919.

The Otis Group Intelligence Scale is a device for the measurement of native mental ability. It enables the teacher and school administrator to determine the intelligence of pupils by groups instead of by individual examination. As was proven by the work done in the United States Army Cantonnments, the Scale is also of value in determining the native mental ability of adults. The use of it will enable the employer to determine the employee's fitness for the job. In 1915, Dr. Otis made use of this Scale in almost the identical form in which it now appears, for testing large groups of children in the schools of California. He also used it in various industrial establishments at about the same time. The Otis Group Intelligence Scale is constructed on the same principal as the well-known Army Test. The difference between the two is a difference of detail rather than of principle. This Scale may be highly recommended by reason of the care taken in its preparation and standardization.

Seattle Juvenile Court Report for the year 1918, together with the Juvenile Court Law. The Ivy Press, 200 Broadway, Seattle, Wash., Jan. 1, 1919. 19 pp.

The report of the Juvenile Court shows an increase in the efficiency of its probation work by the fact that in spite of a population increase for the period under discussion there is a distinct reduction in the number of Juvenile cases brought before the court. As the court work has decreased so has the probationary work increased. Real efficiency is reached by increased community care for children which is true prevention. The statistical data is tabulated which illustrates the report; also the Juvenile Court Law is given in full.

Smith, Leon R. Report of Director of Research for Omaha City Schools, Omaha, Nebr., April 10, 1919. Mimeographed, pp. 12.

Represents work done by present director as successor of H. W. Anderson. Of a total of 179 children examined, 39 were accepted for kindergarten, 60 recommended for special classes, 16 for continuation in present grade, 14 for work permit, 10 to institutions for feeble-minded, 5 for vocational work at commercial high school, and 1 for deaf institute. Examinations included Stanford-Binet Scale supplemented with Yerdes-Bridge Point Scale, and four board tests. The report recommends differentiation between "special" and "ungraded" classes increase in the number of each, and additional facilities for industrial instruction.

Stevenson, B. L., Socio-Anthropometry, An Inter-Racial Critique. Richard G. Badger, Boston, 1916, pp. 153.

An analytical study of sociological and anthropological differences found in the three European races—Teutonic, Alpine and Mediterranean—with the purpose of determining whether it is possible to “obtain a critical scientific basis to be used in the application of anthropologic data to problems in sociology” is Dr. Stevenson’s thesis. The data used are based on the investigations of recognized authorities in the field of sociological and anthropological research. It is concluded that, as far as previous investigations permit analysis, there is no proof of the fact that sociological phenomena are ever directly attributed to anthropometric phenomena.

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Number 4

ALCOHOL AND CRIME

M. J. ROWE, M. D.

Mendocino State Hospital, Talmage, California.

The view of Schmiedeberg regarding the effect of alcohol on the central nervous system is now generally accepted as the correct one. He held that alcohol does not stimulate the nerve cells, but depresses from the very first and that the apparent stimulation is due to the fact that the functions of will and self restraint are the first affected, thus loosening the motor functions until sufficient alcohol is present to exercise its depressing effect on these lower centers and finally the state of unconsciousness may thus be reached.

Various experiments support this view. Type-setters make fewer mistakes when abstaining, soldiers not only make a better showing on the march, but also in precision, rapidity and endurance of rifle firing when not taking alcohol.

If we accept this view, we expect the crimes committed during acute alcoholic intoxication to be those indicative of impaired inhibition and judgment and the removal of social restraints, and therefore not premeditated. Jude studied the relation of alcohol to military offenses in France and from his analysis classified them as premeditated and unpremeditated.

I. The premeditated offenses were:—desertion, falsifying papers, cheating, larceny, abandoning post, asleep at post.

II. The unpremeditated were:—rebellion and resistance of authority, threats, aggravated assaults, homicidal assaults, public drunkenness, refusing obedience, assaulting superiors and outrages of various character.

Of the premeditated class, there were 233 offenses and 12.88 per

cent were alcoholic. There were 164 offenses in the unpremeditated group and of these 67 per cent were alcoholic. Of all the cases studied, 35.5 per cent were alcoholic.

Mattauschek found that 17.5 per cent of the offenses in the Vienna Military Hospital clinic were associated with alcohol. Stier, at the Berlin Charite, found that 50 per cent of his medico-legal cases had to do with alcohol. In the United States Army 12.7 per cent of the cases tried in General Court Martial were due to alcohol. As high as 80 per cent of the offenses tried in one Summary Court in the Philippines were due to alcohol.

Ferri found that as the per capita consumption of alcohol increased in Italy the ratio of crime to population also increased. He graphically charted the crimes during the greater portion of the nineteenth century and also made a chart of the annual wine production and found that the number of crimes varied with the wine production for the year. Obviously the vintage was consumed while new.

The report of the Massachusetts Commission appointed in 1910 to investigate the increase of criminals, mental defectives, epileptics and degenerates, presents the following conclusive facts regarding alcoholism:

"It is not possible to present reliable statistics on this point, but our investigations and the testimony before the commission strongly emphasize the belief that there is an intimate relation between the abuse of alcohol and the amount of crime, insanity, pauperism and degeneracy. Indeed, it is the belief of this commission, based on long personal observation, that the abuse of alcohol, directly and indirectly, does more to fill our prisons, insane hospitals, institutions for the feeble-minded and almshouses than all the other causes combined."

Their report for 1914 states that one-third of the crime, not including public drunkenness, is directly due to alcohol.

Public drunkenness was responsible for 63.4 per cent of all arrests and alcoholism was the chief cause of disorderly conduct, disturbing the peace, and assault and battery; also the frequent cause of sex crimes and homicide.

William C. Sullivan, of the English Prison Service, classifies the crimes due to acute or chronic alcoholic intoxication as crimes of violence, of lust and of acquisitiveness.

He points out that in an individual with a normal nervous system, simple drunkenness gives rise to impulses of acquisitiveness and lust, but rarely of violence. The relatively early involvement of all the nerve centers interferes with the performance of any complex acts and therefore prevents many crimes. The chronic alcoholic has homicidal and suicidal impulses as well as the others of lust and acquisitiveness and the variety of his crimes of acquisitiveness are less restricted, as his higher centers are affected to a greater extent than the lower centers.

Investigations in the English prisons showed that 60 per cent of the graver homicidal offenses were due to alcohol and that practically all were due to chronic indulgence. 82 per cent of the minor crimes of violence were also due to alcohol. A comparative study of the number of homicides and assaults, drunkenness and attempted suicides in agricultural, mining, manufacturing and seaport districts showed an increasing number of homicides and assaults to population in the districts in the order named. They also increased in the same order in drunkenness and attempted suicide except in the mining districts, which had the highest number of cases of drunkenness and the lowest number of attempts at suicide. In this group most of the drinking was convivial and led to simple drunkenness with its relatively low percentage of crimes of violence and attempted suicide; whereas in the manufacturing towns and seaports, chronic intoxication was the more common form of drunkenness and was accompanied by a higher number of homicides and suicides.

The crimes of lust are divided into two classes: sexual violence against adults and against children. The attack of the adult is usually due to simple drunkenness, while the attack of the child is made by the chronic alcohol. Probably 50 per cent of these crimes are the result of drunkenness.

The part of alcohol in the causation of the less impulsive crimes of acquisitiveness is relatively small and is confined almost entirely to the most trivial varieties, such as petty larceny. Instead of being a causal element in crimes of this category, it is obvious that it is positively incompatible with their successful pursuit.

The well-known experience of San Francisco during the period following the catastrophe of April 18, 1906, is noteworthy. The comparative freedom from crime during the period of closed saloons and

the prompt increase in the work of the police courts when the saloons were reopened has been the subject of so much comment as to need no discussion here, further than to call attention to the character of the crimes which showed increase in number, namely, crimes of violence.

Among 256 patients treated for alcoholism at the Mendocino State Hospital, social offenses were common. Among the women they were most commonly the neglect of household duties and offspring, and sexual immoralities. The men neglected their occupations and failed to provide for themselves and their dependents. Threats of homicide and assault were common and threats of arson or suicide occasional.

Twelve men had been accused of crimes. Of these, two committed forgery and one of them had come in contact with the law for this offense twice before his admission to the State Hospital and while under treatment ran away and financed an alcoholic debauch by uttering fictitious checks, for which offense he is now serving a sentence at San Quentin. Three men committed burglary while intoxicated. One man regularly issued worthless checks, for which his relations settled. One made an assault with intent to kill. One attempted rape. Four committed petty larceny, and of these two stole liquor. One stole money with which to buy liquor and one, a mental defective, stole eggs and chickens from his father, which he sold to procure liquor.

One man, who was a sufferer from severe chronic physical ailments and who had made an unsuccessful attempt at suicide by shooting during a previous spree, acted upon the advice of his physician, that his alcoholic habits would kill him, by purchasing and attempting to drink a gallon of whiskey.

In a series of 28 convictions of felonies in one rural county, alcohol had a part in 14. Among these the crimes were uttering worthless checks, burglary, attempted homicide and homicide. Among these 28, 15 were crimes of violence, homicide, attempted homicide and robbery. The robbers were sober. One of those who attempted homicide was a hard drinker. In 11 homicides, five were drunk, two were drinking just prior to the killing, one was recovering from a debauch and one sober man killed an intoxicated man.

As the acute effects of alcohol vary with the individual, so also

do the more lasting mental disorders due to alcoholism vary with the individual makeup, but with the exception of a small group these patients must all be considered as possible perpetrators of crimes and no form of mental alienation is more potentially dangerous to patient or public than that due to alcoholism. The man suffering from delirium tremens is usually fearful by reason of his terrifying visual hallucinations and may be too clouded in his mind to react, or he may commit assault or destroy property in a frenzy of fear.

A Hebrew pawnbroker who had considerable native ability was never very successful on account of his alcoholic habits and was running a junk shop in a country village. He had drunk excessively for years and his supply of whiskey was suddenly cut off by an automobile break-down while traveling through a thinly settled region where local option was in force. While walking to the railroad station he heard a hog conversing to her young in English. He lost all appreciation of his surroundings. Thought he was at home and started to his shop to work and when prevented he assaulted his attendants. He refused food and divided his time between picking up imaginary objects from the ground and standing at an imaginary wall telephone and going through the procedure of numerous and lengthy telephone conversations.

An Irish bartender spent the three days of his active delirium serving drinks over an imaginary bar. When his room was entered, the visitor was courteously greeted and his order awaited. Drinks were mixed and the pay desposited in an imaginary cash register.

A fiery Southerner thought himself in disgrace with the I. W. W., who had surrounded him with airships and submarines and from whom he defended himself with firearms.

Amnesic periods, or periods for which the patient has no recollection, are fairly common in acute intoxication and delirium tremens; but a less common and more spectacular variety of amnesia is that of the dream state, or automatism, in which the patient may do almost anything imaginable, conduct business, transfer property, commit crimes or take long journeys during which his conduct is such as to cause no comment.

One man, who had always been peaceable, broke a shop window and securing a large knife stabbed a policeman and attempted suicide by cutting his throat, and after nearly a year is unable to recall

anything connected with the episode. His last recollection was of walking past a window where there was a display of cutlery and he next found himself in a hospital room with the devil standing in the corner talking to him.

A young Italian came from Nevada to visit his relations in San Francisco, with whom he drank to such an extent that he felt peculiar. He heard his relatives talking of killing him. Many were in the plot, but his cousin appeared to be the leader. He was sure this cousin was about to shoot him, so he (the patient) killed the cousin. He then remained with the corpse for two days, until arrested, and when found was quietly seated on the bed watching the corpse of his victim. For several days he paid no heed when addressed and his conduct was that of a typical sleep walker. Within a space of 24 hours he became alert and talkative and appeared to have no recollection of the time spent awaiting the arrest, of the court proceedings, the trip to the hospital, nor the events connected with the early part of his stay in the hospital.

In alcoholic hallucinosis the patient also suffers from hallucinations; whereas in delirium tremens the imaginary things are more commonly seen, in this psychosis they are usually heard. He will be annoyed by voices whose content of speech is generally threatening, abusing and commanding. He may be annoyed by hallucinations of vision, but more common than these are hallucinations of smell, taste and touch. Chloroform and poisonous gases are thought to be thrown into the room, poisons are put into the food and electrical currents are sent through parts of the body. As these experiences monopolize the patient's attention, he tries to find a satisfactory explanation and so develops the idea that he is being persecuted, possibly for some definite purpose. This idea, constantly stimulated by the annoying hallucinations and combined with the irritability and sullenness of the proverbial alcoholic humor, often drives the patient to violent assaults in supposed self-defense or to the desperation of suicide. As these outbreaks are frequent, sudden and apparently unprovoked, the patients with this psychosis are the most dangerous of any of the alcoholics.

A young naval officer whose unusual susceptibility to alcohol was recognized by his associates was talking with his commander and during this conversation sent for a petty officer and stated that the men

were talking about him and ordered that it be stopped. Shortly afterwards he was traveling by rail and appealed to the conductor to make his fellow passengers stop talking about him. He claimed their remarks were obscene and accused him of the grossest immoralities. These voices continued, but were not permitted to interfere with his duties, although it was often noted that when reading, or at leisure, he would suddenly leave the room with an expression of anger on his face.

Because of these accusatory hallucinations, he came to think that everybody believed him guilty of the offenses of which the voices accused him, so that he finally attempted suicide to escape this disgrace.

Another man was able to converse with his wife and others at any distance. They talked in English and also in an unknown tongue, which he was only lately able to understand. His wife told him she preferred the company of other men, admitted immoral relations with many and that the children were all illegitimate. She informed him that he also was illegitimate and was to be strangled before his next birthday on this account. The constant talking of his family interfered with his rest so he left home, but on the street everyone was discussing a newspaper account of the shameless conduct of his mother. He also heard a conversation in which one party insisted he be shot and the other asked for one more chance for him and then turned to him and directed him to run to Sixth and Market Street, where a man would give him money for his fare to Chicago. While running, he met numerous Greeks who hissed at him and upon his arrival he was redirected to the Third and Townsend Street station, where he was told to accost a man for money. This man refused him money and the voices did not direct him further, so he wandered about until picked up by the police.

While in the hospital, the character of his hallucinations became more pleasant and largely concerned the settlement of an estate whereby he would inherit \$100,000. Following this they finally disappeared entirely.

It is readily conceivable that he might have killed his wife in reaction to the ideas expressed in these hallucinations.

One man felt red hot irons being driven through his head and was advised by the voices that he would be killed if both ends of the rods protruded. He therefore vigorously pounded the region where the

rod was about to protrude and thus kept his head a mass of bruises.

In another group of alcoholics, erroneous ideas formed on insufficient basis dominate the picture. Hallucinations are common, but are seldom vivid or annoying, and are not closely related to the delusions held. These delusions are persecutory in character. The alcoholic habits have alienated him from his friends and family and lessened his general efficiency and he finds himself unable to readjust himself, blames others rather than himself and becomes suspicious and jealous. This is most often centered on the wife, as the estrangement due to the alcoholic habits is ascribed to interest in another and the wife will be jealously watched and the most innocent daily acts accepted as undoubted proof of guilt, and the most petty schemes will be executed to entrap the object of the delusions.

One man, a barber who successfully conducted his own shop, lost it and later was unable to hold employment because of habits, but served some friends at his home. He accused his wife with intimacy with every man who came for his services and said they came primarily to visit his wife, but finding him at home employed him to allay suspicion. He finally drove a customer from the house and once, finding his wife smilingly watching the antics of their children through the window, accused her of smiling at her paramour and administered a severe beating.

Assaults are common in reaction to these ideas, but homicide and suicide seldom occur, as they seemingly become more reconciled to their delusions than those patients more acutely hallucinated.

Another group is composed of those who suffer no acute upset, but gradually fail in mental capacity, shown by lessened regard for personal appearance, memory impairment, irritability and the formation of delusions. These patients may commit petty crimes and misdemeanors and when accused deny all knowledge of them.

One man, who made his home with old friends when he could no longer support himself, pilfered from them so regularly that his commitment was sought. When questioned regarding his thefts he denied them, saying there was no necessity for him to steal, as he had \$10,000 deposited in one bank. When pressed to tell which bank he patronized he said, after a moment's thought, that he had forgotten the name, as his son had the book and he did not know where his son was.

It has been claimed that 20 per cent of the insane men admitted to State Hospitals have alcoholic psychoses. At Mendocino, during the past two years, 8 per cent of our new insane patients had some form of alcoholic insanity. The last United States census shows that during 1910, 10.1 per cent of all the insane admitted to hospitals had alcoholic psychoses. In other words, 67 out of every million population of the United States become potential criminals because of the use of alcohol. During the same year, in California, 138 to each million were committed to the insane hospitals, suffering from alcoholic psychoses.

In investigating the forms of alcoholic liquor used, Robert Lewis Richards found that among the patients admitted to Mendocino for chronic alcoholism, 5 per cent drank wine only, 4 per cent drank beer only, 1 per cent drank wine and beer, 42 per cent drank whiskey only and the remainder drank whisky and other alcoholic beverages. Among the patients suffering from alcoholic psychoses in Southwestern Michigan, reliable information concerning the form of alcohol taken was obtained in 115 cases. Four of these drank beer only; the other 111 all drank ardent spirits in some form.

In addition to the crimes directly chargeable to alcohol, there are many committed by those whose use of alcohol cannot be blamed for the crimes, such as the mentally deficient. A large number of the crimes are committed by these feeble-minded, or morons. They have been uniformly unsuccessful in their attempts at honest pursuits and as they are denied normal social ties, they form doubtful associations with those who can profit by their suggestibility, or rather lack of inhibition and realization of the consequences of wrongdoing.

The promptness with which ideas are accepted by these mental children is shown by the action of one man who has the mentality of a nine year old child. After reading a newspaper bearing headlines announcing that an international crisis would be reached in 48 hours, he immediately issued an ultimatum to his relations and the hospital authorities, demanding his release within 48 hours or they would all be summoned into court.

The moron is peculiarly susceptible to alcohol. Among 100 consecutive commitments for alcoholism at Mendocino State Hospital, 66 were found to have the mentality of children 12 years of age, or less.

The epileptic are also notably susceptible to alcohol. These unfortunates frequently commit murder and grave assaults during an epileptic fury, after alcoholic indulgence.

In this group also belong the insane whose misconduct may be first seen in the use of alcohol. Men who have been sober and respected members of the community may drink to excess, lose all sense of decency, associate with disreputable characters, commit thefts, forgeries or deadly assaults, with no apparent concern as to the consequences. The alcoholic indulgence in these cases is but a symptom, although possibly the first noticeable one.

The mentally unstable are often upset by very small quantities of alcohol and many whose ideas are distinctly anti-social are able to check their reaction to these ideas until their inhibitive powers are lessened by alcohol.

One man of very surly disposition believed everyone about him was trying to harm him and that his fellow patients were the worst offenders in this respect. He was able to curb his desire to react to this belief much of the time, but would occasionally assault a fellow patient and give this expected mistreatment as his excuse. It was finally noted that these outbreaks were always subsequent to the evening visits of an employee of the hospital, who was an old acquaintance. A watch was set and it was found that this friend was supplying small quantities of whiskey.

Among 35 insane patients with criminal records, concerning whom accurate information could be obtained, it was found that ten were under the influence of liquor at the time of the crime. But two of these had alcoholic psychoses, one of whom committed murder and the other attempted it. Four morons were guilty of incest, burglary, robbery and petty larceny, respectively, when drunk. One insane man committed burglary, two made deadly assaults and one committed homicide. It is at least interesting to note that among the other 25, all but four were at least temperate users of liquor.

Twenty-two judges of the District Courts of Minnesota gave varying importance to alcohol as a cause of the crimes tried in their courts. The lowest was ten per cent and the highest 90 per cent. The average for all was 62.75 per cent.

It must be remembered, in considering these opinions, that they are the opinions of 22 different men whose opinions regarding alcohol

may vary between the man who blames alcohol for every offense committed by one who ever takes a drink and the man who does not consider alcohol as a cause, so long as the offender can distinguish right from wrong.

Judge Thomas G. Wildes, in his decision on the Sunday closing of the saloons of Chicago, stated: "I found, when I was in the Criminal Court, that 75 per cent of the prisoners brought before me owed their predicament more or less to the use of intoxicating liquors."

Dr. L. L. Stanley, of San Quentin Prison, states that 20 per cent of the prisoners claim to be total abstainers, 49 per cent admit the moderate use of alcohol and 31 per cent claim to use it excessively. Dr. Stanley, however, places little value on these statistics.

An indirect relation between alcohol and crime is found in that class in which the direct cause is environment. This class lack the proper physical and mental care during development because of the death or insufficiency of one or both parents, on account of alcoholism.

Newsholme tabulated the ages at death of two groups of one thousand men each. Group One was composed of those engaged in the manufacture and sale of alcoholic liquors. Group Two comprised other merchants and shoemakers. Sixty-nine men in Group One died between the ages of 25 and 45, and 41 men in Group Two died during the same period. In other words, 28 men in a thousand died during the period they should be rearing their offspring, because of their alcoholic habits.

The increased probability of the children of alcoholics becoming dependents is shown by the attitude of both life and accident insurance companies toward drinkers. The accident companies not only consider the drinkers somewhat more apt to meet with accidents, but hold that the drinkers are much less apt to recover promptly, if at all. M. J. White, Secretary of the California Society for the Prevention of Cruelty to Children, states that during the year 1916 of the 2229 cases reported to his society, the use of alcohol was responsible, directly or indirectly, for 97 per cent.

The attitude of the courts towards those committing crimes while intoxicated has varied widely. The statement of Sir James Mackintosh has often been quoted as illustrating the English attitude. "This execution will not deter drunkards from murder; it only deters men who are sober from drunkenness."

The attitude of the California courts is shown by the following extracts from the penal code and from court opinions.

The Penal Code of California, section 22, reads:

"No act committed by a person while in a state of voluntary intoxication is less criminal by reason of his having been in such condition. But whenever the actual existence of any particular purpose, motive, or intent is a necessary element to constitute any particular species or degree of crime, the jury may take into consideration the fact that the accused was intoxicated at the time, in determining the purpose, motive, or intent with which he committed the act."

The following is an extract from the instructions of the trial court to a jury in a murder case in 1872; approved by the Supreme Court of California in 43 California Reports, page 344.

"It is a well settled rule of law that drunkenness is no excuse for the commission of a crime. Insanity, produced by intoxication, does not destroy responsibility, when the party, when sane and responsible, made himself voluntarily intoxicated; and drunkenness forms no defense whatever to the fact of guilt, for when a crime is committed by a party while in a fit of intoxication, the law will not allow him to avail himself of his own gross vice and misconduct to shelter himself from the legal consequences of such crime. Evidence of drunkenness can only be considered by the jury for the purpose of determining the degree of the crime, and for this purpose it must be received with great caution.

"In this case, if the killing was willful (that is, intentional), deliberate and premeditated, it is murder in the first degree; otherwise, it is murder in the second degree, and in determining the degree, any evidence tending to show the mental status of the defendant is a proper subject for the consideration of the jury. The fact that the defendant was drunk, does not render the act less criminal, and in that sense it is not available as an excuse, but there is nothing in this to exclude it as evidence upon the question as to whether the act was deliberate and premeditated. Presumptively, every killing is murder, but so far as the degree is concerned, no presumption arises from the mere fact of killing, considered separately and apart from the circumstances under which the killing occurred. The question is one of fact, to be determined by the jury from the evidence in the case, and it is not a matter of legal conclusion, and drunkenness, as evidence of a want of premeditation is not within the rule which excludes it as an excuse. Drunkenness neither excuses the offense nor avoids the punishment which the law inflicts, when the character of the offense is ascertained and determined, but evidence of drunkenness is admissible with reference solely to the question of premeditation.

"In cases of premeditated murder, the fact of drunkenness is immaterial. A man who is drunk may act with premeditation as well as a sober one, and

is equally responsible for the consequences of his act. In murder in the first degree, it is necessary to prove the killing was premeditated, which involves, of course, an inquiry into the state of mind under which the party committed it, and in the prosecution of such an inquiry, his condition as drunk or sober is proper to be considered. The weight to be given to it is a matter for the jury to determine, and it is sufficient for the Court to say to the jury that it should be received with caution, and carefully examined in connection with all the circumstances and evidence in the case. In determining the question of premeditation, you can take into consideration previous threats of the defendant against the deceased, if the evidence satisfies you beyond a reasonable doubt there were any such threats made."

In the opinion of the Supreme Court of California on appeal from a judgment of conviction of burglary in 1892, 93 California Reports, page 111, we find the following:

"The main contention of appellant here is, that the Court erred in giving the following instruction to the jury: 'As to intoxication, I charge you that voluntary intoxication or drunkenness is no excuse for the commission of a crime. Intoxication is only permitted to be given in evidence for the purpose of throwing light upon the intent, motive, or purpose which the person may have had in doing the act complained of. *Evidence of drunkenness can only be considered by the jury for the purpose of determining the degree of the crime, and for this purpose it must be received with great caution.*'

"The portion which we have italicized is repugnant to what precedes it, and likewise repugnant to section 22 of the Penal Code which reads as follows:

"Entering a building with intent to commit grand or petit larceny, or any felony, constitutes burglary. (Pen. Code, sec. 459). The intent with which a building is entered is a necessary element to constitute a particular species of crime, viz., the crime of burglary. Therefore, the jury might have taken into consideration the fact, if such were the fact, that the accused man was intoxicated at the time he entered the building, in determining the purpose, motive or intent with which he committed the act. The jury, however, were instructed that the evidence of drunkenness in this case could only be considered by the jury for the purpose of determining the degree of the crime, about which there was no question, all the evidence, without conflict, being that the building was entered in the night-time.

"We are not at liberty to speculate as to what the verdict might have been if a proper instead of an erroneous instruction had been given. As given, the instruction withdrew from the consideration of the jury evidence which the code says a jury may consider in determining the intent with which an act is committed.

"The evidence in this case tends to prove that appellant, before and at the time he entered the building, was intoxicated. Whether he was intoxicated to such a degree as to render him incapable of forming or entertaining an

intent to commit grand or petit larceny, or any felony, in the building was exclusively for the determination of the jury. The instruction that the jury could not consider that evidence for any other purpose than that of determining the degree of the crime is clearly erroneous and for that error the judgment appealed from (conviction) must be reversed."

In the same year, in the course of an opinion on an appeal from a judgment of death in a murder case, the Supreme Court of California (95 Cal. 428) said:

"It is contended by appellant that the court erred in instructing the jury that 'evidence of drunkenness can only be considered by the jury for the purpose of determining the degree of the crime, and for this purpose it must be received with great caution.' This instruction and others stating the same principle have been frequently approved by this court in murder cases * * *. Appellant relies on the recent case of *People vs. Phelan*, 93 Cal. 111, in which the said instruction above quoted was held to be erroneous. But that was a case of **burglary** in which the degrees of the crime are not based at all upon the principle which distinguishes the degrees of murder. Section 22 of the Penal Code provides that * * * Now, the degrees of murder are based upon the "intent" * * * the deliberation or premeditation * * * with which the act is done; and therefore it is not improper, in trials for unlawful homicide, to instruct the jury that they can consider intoxication only for the purpose of determining the degree of the crime, because that is telling them in substance that they may consider it in "determining the purpose, motive and intent" with which the act was committed. But in burglary the degrees of the crime are fixed solely by the point of time at which the act was done, * * * if in the night-time, of the first degree; if in the daytime, of the second degree. Therefore to tell a jury in a burglary case that they could consider intoxication only in determining the degree of the crime would be not only absurd, but would take away from them the right to consider it in determining the "purpose, motive and intent" with which the accused did the act complained of. Burglary consists in entering a house (or one of certain other buildings mentioned in the code) "with intent to commit grand or petit larceny therein, or any felony;" and it is apparent to the dullest apprehension that a drunken man might unlawfully enter a house without any intent whatever to commit larceny or felony. And it is equally apparent that a jury, in determining with what intent he entered, might well consider the fact that he was intoxicated; but the "degree" of the crime would have nothing to do with it. The court in delivering the decision in *People vs. Phelan*, 93 Cal. 111, did not consider it necessary to state that they were not dealing with a murder trial."

Under California law, anytime that the question of insanity from any cause is raised, before judgment is pronounced, the question shall be submitted to a jury and if the jury finds the defendant insane he shall be committed to an insane asylum until recovered. in which

event the superintendent must notify the sheriff and district attorney and he shall be in custody of the sheriff until brought to trial or legally discharged.

Prisoners under sentence who are found to be insane, by the warden and other officers appointed to make inquiry, shall be sent to an insane hospital and the time there spent shall count as part of the convict's sentence.

The cost of treatment of a patient in State Hospitals, per year, is \$188.53. By conservative estimate, 381 of the insane admitted to the State Hospital were on account of alcohol and 344 was an average of the number of sane alcoholics under treatment. One year's treatment of the alcoholic insane costs \$71,829 and of the sane alcoholics, \$64,854.

Out of a total of 3538, there are 3245 prisoners in the two California State prisons, whose crimes readily permit of their classification in one of three groups:

Crimes of violence:

Murder	481
Other Crimes of violence	649
Crimes of lust.....	304
Crimes of acquisitiveness	1811
Total	3245

Accepting the conservative estimates that 60 per cent of the murders, 80 per cent of the other crimes of violence and 50 per cent of the crimes of sex are due to alcohol, we find that the state is keeping 1,000 men in her prisons at an annual per capita cost of \$198.17, because of alcohol. The minimum annual figure at which the burden to the state, due to alcohol, could be estimated would be \$334,000. This, of course, is the expense to the state alone and does not include any of the cost to the cities and counties of arrest and trial.

The costs to the counties are variable and difficult of accurate determination. For this reason, no figures are attempted concerning the 2800 arrests for drunkenness or 8200 other convictions annually dealt with by the counties of California. The claim is made that the annual cost of the machinery dealing with crime in the state is \$37,000,000.

In drawing conclusions regarding any matter where alcohol is concerned, especial care should be taken, as more passion and preju-

dice have been shown in dealing with the problems related to alcohol than to almost any other subject, of either popular or scientific interest. Most of the statistics published, dealing with alcohol, have been compiled for the definite purpose of showing that prohibition does not prohibit and is undesirable, or of dilating on the ravages of alcohol and charging all the evils of society to its account. In considering these statistics it must be remembered that they are collected under varying standards, with shifting public ideas relative to alcohol, that hardly two states operate under the same drink laws and that the character of the population and public opinion varies in different localities.

While the bald statements of some men whose experience should make them competent to pass opinions are quoted, the statistics of the more conservative investigators only are used, and it is noteworthy that they usually call attention to the fallibility of their own statistics. The warden of one prison states: "We do not have any statistics on this subject, owing to the fact that we do not have any way of securing authentic information. I would make a rough estimate that 50 per cent is the result of alcohol."

One man of large experience among criminals and insane writes: "I would not take the statement of any appreciable number of my patients as worth the ink used when it comes to valuating the matter of liquor. The same is true in regard to prison inmates. Those whose crimes are directly due to alcohol will usually deny it and those who have some ulterior motive will, in seeking an excuse, give liquor as the cause when it does not exist."

With such almost universal distrust of statistics it seems best to subscribe to the belief generally held in clinical medical studies, that the careful study of a small group is more enlightening than the superficial survey of a mass of material. Anyone who has considered the problems of the inefficient, whether he is particularly interested in the physically, the mentally, the socially or the industrially inefficient, must admit that alcohol has its evil effects, but we are surely not warranted in charging all the evils of society to alcohol. We are justified, however, in believing that 60 per cent of all crimes of violence are directly due to alcohol; that half the crimes of sex are due to alcohol; that possibly 10 per cent to 15 per cent of the premeditated crimes of acquisitiveness are the result of alcoholic excesses and

that 10 per cent of the insanity is due to alcohol and that by reason of the ideas peculiar to these patients, they are all potentially criminals; that many crimes are committed by the feeble-minded, whose alcoholism is only a symptom; that alcoholism and criminal acts are both symptoms of some forms of insanity; that alcoholism does excite to violence some insane and epileptics who would be harmless if they had no access to alcohol, and that the state annually spends over one-third of a million dollars in looking after those who come into contact with the law because of their alcoholic habits.

And finally, we must conclude that the effect of alcohol varies with the individual susceptibility and that an inherent defect of the mental makeup must be present in those cases where excesses and other untoward effects occur.

DEMOBILIZATION AND THE CRIME RATE

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The cessation of hostilities has focused public attention upon the problems of readjustment to a peace basis. Yet in all discussions little or no attention has been paid to the probable influence of demobilization upon the crime rate. There has been a natural hesitancy on the part of writers to emphasize this problem, as reference to it would seem to offer a gratuitous insult to those men who have risked their very lives for us. One can readily sympathize with this sentiment, for the country owes more than a debt of gratitude to the men who were called to its defense. But blindness to facts is not only an improper social attitude, but implies a policy that will redound to the injury of many of the returning soldiers. Let us remember that the army was recruited from all social classes, even the attempt to exclude ex-felons by means of the draft being but a very incomplete success. We are bound, therefore, to find all degrees of virtue, from the highest to the lowest, in the army. Under the stress of rigid discipline, the less desirable type was kept under restraint. But with demobilization and freedom from coercion, the tendency will be to revert in an enhanced degree to former standards of conduct.

The status of war has had a direct influence upon delinquency. This has been difficult to measure in our country because of the poor quality of judicial and penal statistics, and the fact that the effect did not become apparent until perhaps a year after the inception of war. This lag made it impossible for any of the statistics to be carried up to date. But the experience of court and prison workers is to the effect that there has been an increase in juvenile delinquency, and a decrease in adult crime. This is amply verified by reference to European statistics for the period of the war. The decrease in adult crime is easily explained. All investigations of adult delinquents prove conclusively that 75 per cent are over 18 years of age and under 30, and that over 50 per cent are unemployed. This age group corresponds exactly with that from which our army was recruited.

By this process of selection, therefore, the potential criminal element in the population has been greatly decreased. Furthermore, of those not inducted through the draft machinery or otherwise, many found lucrative employment in the various war industries, which had created an enormous and unprecedented demand for labor, especially of the unskilled kind. Consequently that element of the criminal class, which previously came from the ranks of the habitually unemployed, was diverted into other channels. It was inevitable, therefore, that the continuance of the war should be associated with a decreasing crime rate.

But experience in other wars has proven that this almost idyllic state of affairs exists only during the period of war. With demobilization there is a powerful tendency, not only to return to ante-bellum conditions, but even to increase the crime rate to abnormal proportions. This is amply borne out by the experience of the country following the Civil War. Unless a preventive program is set into operation, therefore, we may expect a repetition of this phenomenon as soon as demobilization and the shut-down of war industries occur. If there be any truth in the conception that society itself determines very largely the amount of crime it shall suffer, then we owe it to the returning soldiers to see that conditions for which the community, and not they are responsible, shall not exist as inciting causes for criminality on their part.

What are the factors, then, that will tend towards an increase of the crime rate? Chief of these will be unemployment. It will be some time before normal production is achieved again. In the meantime, with the cessation of war time industries, and the temporary instability of markets, there will be created a surplus labor supply. Unemployment must follow, and the vitiating effect of idleness upon character will again be in evidence. Those who belong to the "drifter" class, without the intelligence or initiative to adapt themselves to a new environment will probably drift towards a life that will bring them into conflict with the law.

Upon this type of unstable society, it has been the custom to unload thousands of soldiers, without regard to the possibility of maladjustment. If it will be difficult for war time workers to secure employment, how much more reason is there to expect that the soldier will have greater difficulty? One potent reason for this is that many

soldiers will be physically incapacitated for holding a job. In former wars many of them returned physically debilitated, unable to work, as a result of ravages of disease. The picture of this type is a very familiar one. It is stated on good authority that the country was surfeited with them after the Civil War. With the much more severe fighting of this war, we may expect that a very appreciable number of soldiers will find themselves temporarily, at any rate, unfit for employment.

There will be psychological factors at work, that will have a powerful tendency towards delinquency. This will be evident when one contrasts the mental tension of the battlefield with the comparative monotony of civilian pursuits. It will be a task of great magnitude to bring about this mental adjustment within a short period. There will be an inevitable tendency to find a substitute for the excitement of the battlefield in the various forms of criminal behavior. For only in the latter will many find an approach to adventure, attended with dangers. That this is very probable is evident from the fact, that, even in normal times, crime is always surrounded by a kind of romantic atmosphere.

And finally, there is the danger of lowered standards of community morality, associated with festival occasions. The round of municipal and state activities, that will soon begin in honor of the homecoming soldiers will be the signal for vice to attempt to show its head. This is no hypothetical conjecture, or figment of the imagination. Our own experience upon other occasions gives ample cause for such belief. The San Francisco Exposition brought thousands of prostitutes and their retinue to that city. The Hudson-Fulton Commemoration did the same for New York City. Chicago and St. Louis had similar experiences; and all who have given more than passing attention to the problems of crime know that the amount of prostitution may be used as an excellent index of the amount of crime in general. The two go together. For the criminal is attracted by the prostitute, and the prostitute by the former. Will there be a better opportunity for her to ply her vocation, than during a period of high emotional stress and intoxication, such as will most certainly exist when the troops return? A general riotous indulgence, may well be feared, unless the community takes action.

Such, then, being the factors that will operate towards an increas-

ing crime rate, what kind of program may be devised to counteract their influence? A knowledge of causes sends one far towards the remedy. Prevent unemployment, provide the soldier with substitutes for the war emotions, and maintain a continuous repressive policy towards vice; these will keep crime within bound.

The government has pointed the way towards a method of re-adjusting war workers to a new situation. The press reports that a government mask factory in Long Island City has resolved itself into an employment agency in the attempt to secure new positions for its employees. This policy could very well be emulated by all the large government plants before closing. Furthermore the policy suggested in pre-war times, of closer co-operation between large employers of labor and the public employment agencies, to the end that the job and man be brought together, should be extensively developed, especially as war time exigencies have developed a spirit of co-operation, that should be taken advantage of. But nevertheless, there will undoubtedly remain a large residual labor supply, for whom industry in the transitional period will be unable to furnish employment. In such a contingency it would be well to adopt the suggestion, emphasized again by the British Labor Party in its Reconstruction program, that necessary government work be so distributed as to furnish employment during a period when normal industrial activities create but slight demand for labor.

The demobilization of the armed forces should not proceed at a pace rendering it impossible for the soldiers to adapt themselves to the new situation. There is a natural desire, of course, to see all the soldiers home at the very earliest moment, yet it would be kinder to them if the transition were not made too suddenly, thus giving industry an opportunity to readjust itself, and create a demand for their labor. The too rapid influx of millions of soldiers would cause an unfavorable reaction upon wages, and conditions of labor in general. It should be borne in mind, too, that women have substituted very largely for the men who were called into service. What the effect of peace will be upon them is not yet apparent. There will be many, of course, who will return to the home. But it is hopeless to expect that all the millions who were called into industry will be thus conveniently disposed of. The war, itself, has created a permanent demand for women in types of occupation other than those they form-

erly were accustomed to. Returning soldiers must consequently meet this new form of competition.

In response to patriotic impulses, many soldiers will be given employment at their old tasks. But it would be better for the country to realize that unless human nature, too, has undergone a complete revolution during this war, soldiers after the first blare of welcome, will be expected, very largely to shift for themselves. If demobilization is conducted in a slow manner it will be possible for industry to adjust itself at the same time. In summing up, then, the rate of demobilization should be determined by the ability of the country to accept the soldiers back with the least jar, not so much to itself, as to them.

To avoid the problem of the debilitated soldier at large in the community, the military authorities should initiate a policy of discharge only on evidence of physical fitness. No reference of course is intended to those permanently afflicted in one form or another. In the past these have generally been thrown upon soldiers homes. But in response to more humanitarian motives, efforts have been organized to teach new trades to these crippled victims of war, to the end that they may again be made self supporting. Government insurance, too, will make their lot more desirable than in former times.

In meeting the second potential factor in the crime rate, reliance must be placed upon those organizations which have so effectively maintained the soldier morale during the war. However important these agencies were then, they are of greater significance and value in the period of demobilization. For the spirit engendered by a righteous cause was to a great degree sufficient in itself to maintain a high morale. But without this stimulus in peace times, there is great danger of relaxation in personal standards of belief and conduct. That some substitute for the emotions of the battlefield is essential has been recognized by the various welfare boards, and has been emphasized by them in their War Fund Drive. But the public has not adequately appreciated this necessity, and at the present writing the press reports indicate that the minimum amount asked by them will be reached with great difficulty. It should be borne in mind, that any funds contributed to these organizations will undoubtedly reap a harvest of lessened disease and crime.

As regards the third factor, it should be again recalled that vice, though not essentially a war problem, is enhanced by it. The problem

Demobilization and the Crime Rate.

may be largely met by applying the ordinary preventive forces of peace time. Abraham Flexner has conclusively demonstrated that vice is a varying entity that can be increased or decreased, dependent upon the police attitude, and that it is not, as is so often claimed, an answer to a definite demand. On the contrary, by various forms of stimulation, the vice forces can create an artificial demand. The policy of repression, therefore, is not a Puritanical response, but one rooted deep in a fact basis. What this policy can do was amply demonstrated by the former administration in New York City, when both vice and crime showed a decrease, this latter association being by no means fortuitous. A continued control of the liquor traffic, especially as it relates to soldiers, is an essential element in the program. Finally, mention should be made of the Social Hygiene Division of the Commission on Training Camp Activities. The public has had little opportunity to learn of the work of this division, as it has worked quietly and unostentatiously. Yet what it can accomplish has been seen in the cleaning up of scores of cities, among them some of the largest in the country. In most cases this was accomplished in co-operation with the municipal authorities, who usually complied very willingly when they were apprised of the true significance of the evils. A sub-division of the Social Hygiene Division, known as the Law Enforcement Division, has, with limited resources, done effective work in controlling the liquor and vice evils in the vicinity of training camps and embarkation ports. This division has rigidly enforced the law prohibiting the sale of liquor to soldiers, and has co-operated with the police to keep the streets free of prostitutes. Such work has served effectively to maintain the health and morale of the army in war time. Reason dictates that it be maintained during the period of demobilization, and that no slackening be permitted in the attack on these evils, which are ever ready to raise their heads, when vigilance ceases.

Thus in broad scope, has been sketched the outlines of a program by means of which an altogether deplorable increase in crime may be prevented. There is nothing revolutionary in any of the proposals. All the agencies to be utilized already exist in one form or another. It needs but their conscious utilization for a new purpose. In the conduct of the war, the government has shown a gratifying appreciation of social problems. Let us hope that in the next critical epoch this interest will be sustained.

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Vol. IV.

July, 1919

No. 4

PERIODICAL LITERATURE

ORDAHL, GEORGE: INDUSTRIAL EFFICIENCY OF THE MORON. During a labor shortage in which a canning factory recruited moron workers to relieve the situation, an opportunity was made to compare their efficiency with that of the normal adults employed at the same time in the same factory. In peeling tomatoes the women showed an average earning capacity of 60 per cent of that of the normal women; in packing tomatoes the efficiency was about the same, 62 per cent. The coefficient of efficiency was bound to correspond closely with the intelligence quotient. Temperament was found to affect efficiency to a marked degree. Indications are that the labor of the middle and high grade morons could be utilized in large numbers and to greater advantage in factories under expert supervision and direction than in any other way known.—Training School Bulletin, February 1919. pp. 145-153. K. M. C.

PRESSEY, SYDNEY L. and COLE, LUELLA A.: IRREGULARITY IN A PSYCHOLOGICAL EXAMINATION AS A MEASURE OF MENTAL DETERIORATION. It has been frequently stated that irregularity in a psychological examination is evidence of the possible presence of a psychosis but surprisingly little careful or systematic work has been done

on this subject. The present paper reports the results of psychometric tests of 158 feeble-minded cases, 67 dementia praecox patients and 55 chronic alcoholics. Using the Yerkes-Bridges Point Scale, the average scattering of the feeble-minded was 17 points, of the dementia praecox patients, 20 points, and of the chronic alcoholics 22 points. The different groups overlap each other very considerably but it was found that the scattering on five of the tests was much more clear cut. These tests were definitions superior to use, memory for Binet figures, absurdities, dissected sentences, and definition of abstract words. These five tests give almost all the differential indications of the entire twenty tests, with almost no overlapping. Although irregularity is not invariably a sign of deterioration, it indicates some factor which interferes with the freedom of the examination. Such factors are poor co-operation, illiteracy, malingering, psychotic disturbance of a temporary nature, or finally deterioration. If the patient shows an irregularity greater than that of feeble-minded individuals, the examination cannot be used as evidence of primary amentia.—*The Journal of Abnormal Psychology*, XIII-5, June, 1918. H. P.

PUBLICATIONS RECEIVED

The American Social Hygiene Association. 1919. *The Community, Prostitution and Venereal Disease.*

This plan for organized action against prostitution shows the advisability of punishing the direct offenders as well as those who profit indirectly in immorality. The improvement committee's first duty is to have both under cover and open investigations. Second, there must be a good equipment; sanitary jail; hospital facilities; reformatory and necessary laws to make the conviction of those involved in commercial prostitution possible. Eleven of the most needed laws are suggested. Third, the necessary personnel for guarding the welfare of the people should be carefully chosen. Fourth, the proper use of information gathered must be considered. Fifth, as a last resort publicity through the press might be used, but this often means a fight on local officials and it is usually better to have friendly assistance rather than an attack. Sixth, protective work for girls in the form of a recreational and educational program will go a long way towards solving the problem.

Bailey, William B. *Children before the Courts in Connecticut.* U. S. Dept. of Labor, Children's Bureau, Publication No. 43. Govt. Printing Office, Washington, 1918.

This report includes a brief resume of the history of the legislation appertaining to juvenile delinquents, a study of the court procedure in their cases, an inquiry into the activity of the probation officers, a short review of the work of the institutions provided for this group of delinquents, and a detailed study of the cases of delinquent children before the courts in twelve cities of Connecticut. It is well written and contains a large amount of con-

crete data. This study should be of especial value to those interested in the history of and progress in care of delinquents.

California Commission of Immigration and Housing. A Community Survey Made in Los Angeles City.

This pamphlet gives a description of the method and a tabulation of the results of a social survey of a considerable section of Los Angeles, Calif. The completed survey represented the co-operative effort of 350 persons representing various social agencies and one of its principal values is stated as bringing to the attention of the various social workers the inter-relations of social problems. The principal means of securing information was through especially prepared questionnaires. Brief data are presented concerning the following items of social interest: social activities of schools, churches, and libraries, playgrounds, settlements, health departments, charities, housing, municipal nursing, probation department, police department, compulsory school attendance, Americanization, etc. This survey should be of particular value in formulating a constructive social policy for this community.

California State Board of Charities and Corrections. County Outdoor Relief in California. State Board of Charities and Corrections Publication No. 5. State Printing Office, Sacramento, 1918.

This bulletin presents an analysis of the various methods of public, (or outdoor) relief in California, stating the merits and weaknesses of the various systems. The Board of Charities and Corrections stand ready to promote constructive methods of relief administration.

Gruenberg, Benjamin C. Julia Richman High School, New York City. Toward the Discovery of Native Talent. Reprinted from *School and Society*, IX-216, February 15, 1919.

Much of the opposition to "standard tests" in the school room rests not so much upon the supposed inadequacy of these tests as upon the feeling that the principle of testing is arbitrary and "undemocratic". While an attempt is being made to convince doubters and skeptics, we prefer to expose children to instruction in the hope that a reasonable number will "take". The question of finding out in advance of training what capacity a child may have is indeed an important one. The relation of training to imagination and modes of behavior is a problem which is not yet solved, but gains in this and similar directions are being steadily made, and in the meantime it is desirable that teachers learn to think in terms of individual variation and capacities,—a very different attitude from the traditional one heretofore cultivated by classical and literary studies.

Hoffman, Frederick L. Army Anthropometry and Medical Rejection Statistics. Prudential Press, Newark, N. J., 1918. 114 pp.

Dr. Hoffman gives a history and outline of methods used in the examination of the physical fitness of recruits for service in the United States Army. He shows some of the weaknesses of the old system of examination by non-medical line officers. Comparison of methods and results is made with various other armies of the world. Part II takes up recent experience under war conditions pointing out important changes in methods of examination

and rejection rules in draft requirements. As a result of his study Dr. Hoffman calls for a national anthropometric survey to determine accurate physical standards and the need for rehabilitation of the physically defective. It is interesting to note that the pressure of emergency has revealed the inefficiency and low standard of former military methods which the injection of "new blood" into the service has helped to modify and improve.

Hoffman, Fredercik L. Statistician, Prudential Insurance Co., Newark, N. J. Leprosy as a National and International Problem. Reprinted from the *Journal of Sociological Medicine*, XVII-2, April, 1916.

From a statistical point of view, this article is of unusual value, and although the figures stated are considerably under the actual number of existing lepers, due to the fact that many lepers are not in homes, or even under treatment, such statistics are nevertheless of much interest to any interested in the subject. Descriptions are given of control work and prophylaxis as well as treatment in regions where the problem is being handled scientifically. Legislation regarding segregation and treatment is also discussed. There is evidence that leprosy exists in this country to a much greater degree than has been generally believed to be the case, and that the risk of its introduction from the West Indies, the Philippines, South America and the Orient must be considered greater at the present time than in former years.

Huey, Katharine. Problems arising and Methods Used in Interviewing and Selecting Employees. Reprinted from *The Annals of the American Academy of Political and Social Science*, Philadelphia, May 1916. 11 pp.

The employment manager needs (1) an analysis of all departments for whom he is to supply employees, and include in this analysis an understanding of department heads; (2) knowledge of the extent and nature of the sources of supply; (3) methods of tapping the sources of supply efficiently; (4) adequate office and clerical equipment; and (5) ability to judge his candidates. Problems to be faced include efficient recording of qualifications. Prime requisites for efficient service are continual co-operation between employees and the employment manager to meet unexpected demands for labor, opportunities for promotion, and the need for a high grade of morale within the organization.

Langfeld, Herbert Sidney. Assistant Professor of Psychology, Harvard University and **Allport, Floyd Henry,** Assistant in Psychology, Harvard University. *An Elementary Laboratory Course in Psychology.* Houghton Mifflin Company. 1916. p. 147.

A manual for students who have had only an introductory course in psychology to cover a half-course of five hours a week. It has been arranged so that the experiments can be readily understood by those beginning psychology and can be performed, with a few unavoidable exceptions, with very simple and inexpensive instruments. The book is also of value to private students who desire an introductory knowledge of experimental psychology.

McIntire, Ruth. *Children in Agriculture.* Pamphlet 284 of the National Child Labor Committee. New York, Feb. 1919. 16 pp.

This bulletin tells in a vivid manner of the contest in certain rural sections, between agriculture and wages on the one hand and the education of children on the other. The beet, cotton, and tobacco fields which are employing thousands of children of school age are shown both to be harmful in direct effects on the health and to be preventing the children from "making a more intelligent use of their opportunities than the parents have been able to do." The effect on schooling has been the loss of all but the barest and most intermittent education. Only a reorganization of school districts on a larger unit basis can make possible the enforcement of compulsory education in these agricultural districts. The loss is shown to be the children's, the parents' and the nation's with the responsibility on the public.

New York State Hospital Commission. Twenty-ninth Annual Report for the Year ending June 30, 1917.

A number of valuable comparisons have been made relative to the various psychoses, death rates, sex, first admissions and readmissions, parentage and nativity, age, family history, economic condition, etc. of insane patients in institutions in New York State. Of particular interest is a table showing principal causes of mental disease by percentage and sex:

Causes	Males	Females	Total
Alcohol	18.2	6.4	12.6
Syphilis	20.8	6.5	14.0
Drugs	0.1	0.4	0.2
Abnormal make-up	29.0	31.7	30.3
Injury to head	0.8	0.2	0.5
Physical illness	1.5	2.2	1.9
Senility	6.9	11.3	9.0
Arteriosclerosis	12.0	10.2	11.6
Epilepsy	2.2	2.2	2.2
Pregnancy, childbirth and lactation .....	...	3.7	1.8
Death in family	0.7	3.8	2.2
Loss of employment and financial loss.....	2.0	1.4	1.7
Disappointment in love	0.5	0.7	0.6
Other specified causes	5.9	16.0	10.7
Unascertained	19.3	25.1	22.1

A number of charts are given to illustrate the statistical analyses which are presented in a clear, lucid style.

Ordahl, George, Psychologist and Educational Director, Sonoma State Home, California. Heredity in Feeble-Mindedness. Reprinted from the Training School Bulletin, Vol. XVI. Pp. 1-15.

A report is made upon fifty unselected families in which at least one child and one parent have been examined by the writer. In all 30 fathers and 47 mothers, or a total of 77 parents, were examined. Of this number, 63.6 per cent are defective mentally. To the 50 families, 219 children have been born. Of the 160 living, 48.1 per cent are normal and 51.9 per cent retarded or

defective. Causes of feeble-mindedness are found to be 60.0 per cent hereditary 22.0 external and 19.0 per cent unknown. The majority of parents responsible for defective offspring are themselves defective but not to such a marked degree as to be readily detected. Such persons as are represented by the parents studied can be detected by expert means in the early years of their school life.

Pollock Horatio M. and Furbush Edith M. Annual Census of the Insane, Feeble-minded, Epileptics and Imbeciles in Institutions in the United States, January 1, 1918.

This study presents a brief statistical survey of the insane, feeble-minded, epileptics and inebriates in 575 public and private institutions in the United States. In addition to giving figures concerning kinds of institutions, and number and sex of inmates for each group, data is given concerning the admissions, deaths, patients on parole, and per capita cost of maintenance for the state hospitals. On Jan. 1, 1918, there were 239,820 insane patients, 39,381 feeble-minded persons, 11,944 epileptics, and 3,565 inebriates in institutions in the United States, exclusive of Almshouses and penal or reformatory institutions.

Richardson, Roy Franklin. Professor of Education, University of Maine. *The Psychology and Pedagogy of Anger. Educational Psychology Monographs, No. 19.* Warwick & Yorke, Inc., Baltimore, 1918.

A study of mental situations stimulating anger, the behavior of consciousness, the ideas and feelings associated in the development of anger, the reactive side of consciousness, individual differences, disappearance and diminution of anger, devices used in the control and facilitation of the emotion, and conscious after-effects which follow. The method used was introspection by ten graduate students of Clark University and two persons outside the University. No apology is offered for this uncontrolled introspection, since emotions are involuntary processes and do not lend themselves to the control necessary for laboratory technique.

Woodson, Carter G. Editor of the *Journal of Negro History* and Author of *The Education of the Negro prior to 1861. A Century of Negro Migration. The Association for the Study of Negro Life and History, Washington, D. C. p. 221.* March 31, 1918.

Written by a member of the colored race who is thoroughly familiar with the history and tribulations of his people, this book relates definitely and concisely the migration of the Negro in the United States from 1815 to the present day. He discusses the transplantation to the North, colonization in its relation to migration, confusing movements of his people, the exodus to the West, and that during the World War, and points out that the intelligent laboring class, more than any other, has been principally concerned in moving to regions where they would be treated with greater fairness. The book is thoroughly indexed and followed by a copious bibliography.

REQUEST FOR COPIES OF JOURNAL.

Calls for Volume I Numbers Two and Four of the Journal of Delinquency which are received cannot be filled because these issues are out of print. The Managing Editor would appreciate it if anyone having copies of these issues of which he is willing to dispose, would communicate with him.

ERRATA.

The two following errata should be noted in the Journal of Delinquency, Vol. IV, No. 3, p. 114, footnote 8, "Borderline and feeble-minded" should read "borderline and potential feeble-minded"; p. 116, under "boys' retardation in years", ".87" should be ".89".

The Journal of Delinquency

Volume IV

SEPTEMBER, 1919

Number 5

PHYSICAL AND MENTAL CONDITION OF DELINQUENT BOYS¹

CLINTON P. McCORD, M. D.

Health Director, State Department of Public Instruction, Pennsylvania; Formerly Consulting Psychiatrist, Berkshire Industrial Farm at Canaan, N. Y.; Instructor in Educational Hygiene, Albany Medical College; Professor of Hygiene and Physical Diagnosis, Cornell University Summer School of Physical Education; Fellow American Academy of Medicine

For the last few years organizations like this Conference have carried on their programs topics similar to the one that is up for discussion this evening. Usually the discussions have been lengthy, sometimes bitter, and they have been presented to listeners who, as far as fundamental principles are involved, did not need to be convinced. Seldom were there present at such meetings any considerable number of judges, lawyers, doctors and state and municipal officials—the very people whose understanding and cooperation would have made practicable the application of the truths developed. The trouble is that the people who are present at these meetings do not require conversation upon ninety per cent of the platform while the people who are “holding up the procession” are not here and have not heard the truth as it has been presented this evening, for example. The motto, that “public health is purchasable” applies equally well to the question of individual efficiency and social harmony. When a philosophy similar to that which projects preventive medicine is seen to hold in preventive criminalistics then will we see a drop in the curve of crime and delinquency similar to the drop in the curve of preventible disease plotted on the books of all well equipped state and municipal health departments. In spite of all the machinery of police systems, courts and reformatory and penal insti-

¹ (Read before the Capitol District Conference of Charities and Correction, Albany, April 1919, and also before the National Conference on the Education of Truant, Backward, Dependent and Delinquent Children at Atlantic City, June 4, 1919).

tutions the incidence of crime and delinquency remains static. It is not necessary to tell you workers that this indicates that the forces thus far focused upon these conditions have been curative and not preventive in character, and that the roots of the trouble will continue to nourish and feed these socially and economically undesirable weeds as long as society contends itself with simply clipping off some of the unsightly blossoms. There are many sides to this question of prevention of delinquency that suggest themselves to you. A portion of such a program surely involves a discontinuance of certain obviously extravagant, unproductive and foolish supposedly remedial methods, and the renouncing of unproductive procedures—"cures" that have not cured, reformatory methods that have not "reformed." When a man serves his fifth sentence or his fourth or his third or his second for a crime of a certain character; or, when a juvenile delinquent has repeatedly been an object of concern on the part of a community, the least that can be expected is that someone should question the value of the methods available for handling the case. The physician who without a diagnosis continued to administer exclusively a single remedy day after day with the result that the patient grew gradually worse would be open to severe criticism. Yet, this is exactly the complexion of our methods in dealing with delinquency and crime. Out of one hundred superintendents of reformatories who five years ago were asked what definite scheme they had for the reformation of their juvenile charges, a scheme scientifically developed and specifically applicable to the individual case, ninety-nine acknowledged that they had no definite plan. What I have said in the last few minutes is in no sense a reflection on the interest, earnestness, and high ideals of the persons engaged in court, probation or reformatory work; it simply means that such interest, earnestness, and idealism have been expended along blind-alley lines. The day is passing when the conscience of any person responsible for the disposition or treatment of a delinquent will be satisfied to deal with such a case except in accord with a full knowledge of the facts relating to the physical, mental, and environmental status of the case. Then cases for probation will be scientifically selected; so-called reformatories will be free from the feeble-minded; the real indeterminate sentence will be a fact and the proper educational, social, recrea-

tional and vocational organization of our reform institutions will be accomplished. The Berkshire Industrial Farm at Canaan for over a year has maintained by virtue of an unusual superintendent and an enlightened Board of Managers what we feel is a fundamental feature of such an institution in the light of what we have said in the foregoing paragraphs, namely complete physical, neurological and mental examinations of all boys sent there from various sections of the country. We believe that such examination of the cases committed to a reformatory is as **imperative** a feature of the institution as is **food** and **shelter** for the children. We believe that when the economic and educational principles involved in this statement are fully recognized, the misdirection and waste of philanthropic monies put into reclamation work will be evident. In that day, before a cent of public money or private money goes into work with delinquents we shall demand to know whether there is some possibility of the results being commensurate with the cost; and the answer to this question can be given only in terms of scientific examination, prognosis and recommendation upon the individual case to whom our reformatory program is to be applied. At Berkshire the wisdom of such provision has been demonstrated to a degree from the dollars and cents standpoint even in the brief time the plan has been in operation. As yet it is too early and the details of the program for certain reasons have not been far enough advanced to appreciate the finer rewards along the educational line and in the field of mental adjustments and reformation of personality. I trust it will be interesting, however, to give you a brief statement upon the subject assigned me, "Physical and Mental Condition of Delinquent Boys," in this particular institution.

COMPARATIVE CHART OF LEADING PHYSICAL DEFECTS

The accompanying chart represents physical examinations of the initial hundred cases at Berkshire Farm compared with the results of examination of one thousand Albany school children of about the same age and of all social classes. It will be noted that abnormal conditions of the nose and throat are roughly four times as common among the delinquent boys. Some of the factors functioning in this instance are quite evident to us. Orthopedic conditions of the spinal column are about balanced. Decayed teeth are a trifle more prevalent

among the delinquents in spite of the fact that many of them have had institutional supervision for some time. Defective vision is less prevalent amongst the delinquents as are also diseased tonsils and various miscellaneous and minor physical defects. Malnutrition is twenty-five per cent more common amongst the delinquents, but the condition usually persists for only a few months following admission to the regular life and habits and fresh air of the institution. The evidences of early rickets exist eight times more frequently amongst

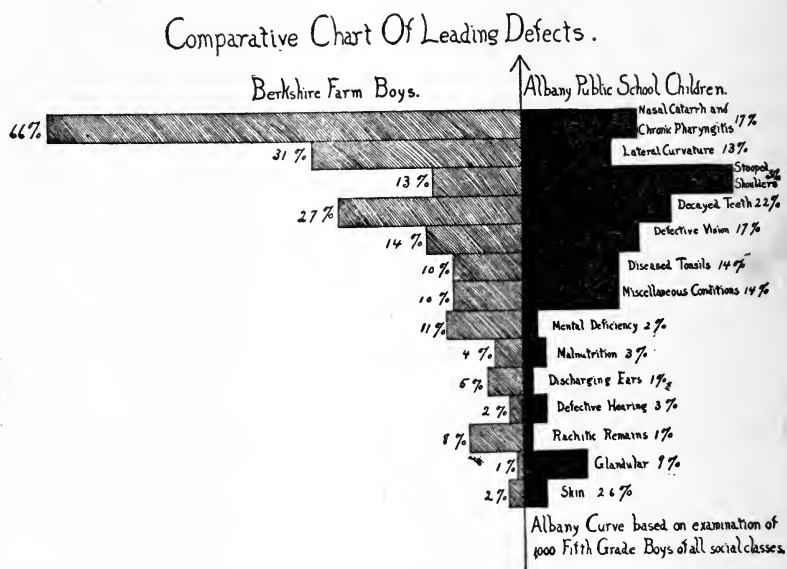


Fig. 1. Comparative chart of leading defects.

the delinquent boys. Discharging ears are five times more common amongst the delinquent boys which fact correlates naturally with the greater prevalence of nasal catarrh and chronic pharyngitis amongst the institution children. The item of greatest significance is the relative incidence of mental deficiency, this condition being five and one-half times more common amongst delinquents; and if the border-line cases are considered, then the delinquent group presents twenty-three times as many cases as does the unselected public school group.

REMEDIAL PHYSICAL DEFECTS AMONGST BERKSHIRE CASES

It is only in line with good hygiene and humane policy that the physical condition of the child must be considered before any line of training is pursued. Malnourished children, children with decayed teeth, defective vision, nasal obstruction, etc., have, as a result of research, fallen into the class of cases that represent a heavy expense to a school system when these defects are permitted to persist. In school hygiene the fact has been definitely accepted that it is actually cheaper to treat the teeth of children, to feed the malnourished, etc., than it is to permit these conditions to persist and to assist in bringing about retardation and repetition of grades. It is doubly imperative that we correct such conditions as a part of our program in the treatment of delinquents. Let us glance hastily at the remedial physical defects exhibited in the group of Berkshire boys:

Diseased tonsils—10 per cent.

Nasal obstruction—1 per cent.

Defective vision—14 per cent.

Decayed teeth—27 per cent.

Discharging ears—5 per cent.

Malnutrition (all recent admissions)—4 per cent.

Hernia—2 per cent.

Varicocele—3 per cent.

Tongue-tie—1 per cent.

Nasal catarrh, chronic pharyngitis or both—66 per cent.

Orthopedic conditions, including flat foot (12 per cent)—57 per cent.

Impacted ear-wax—21 per cent.

Circumcision indicated from the standpoint of personal hygiene—47 per cent.

Circumcision indicated from the standpoint of reflex irritation—17 per cent.

OTHER CONDITIONS AMONG DELINQUENT CASES

Speech defects—3 per cent.

Malocclusion of teeth—15 per cent.

Club foot—1 per cent.

Double inguinal hernia (operated)—1 per cent.

Hypo-spadias (operated)—1 per cent.

Cardiac murmur (functional in nature)—2 per cent.

Cardiac arrhythmia (functional)—10 per cent.

Poor vaso-motor tone (including a marked case of dermagraphism)—27 per cent.

Disorders of smell (poor discrimination; dull sensibility; finer recognition lacking)—10 per cent.

Disorders of taste (finer discrimination lacking; failure to recognize and appreciate higher dilutions of salt, sweet, sour, and bitter—54 per cent.

Defective color vision (red-green blindness)—3 per cent.

Not vaccinated against small-pox—12 per cent.

The Wassermann reaction on the basis of the first hundred cases was negative in 98 per cent and a reaction of no significance was obtained in 2 per cent.

The above findings are of interest from an administrative standpoint, since they outline the physical problems that call first for consideration in the application of reformatory methods. The elimination of physical handicaps as far as practicable before an extensive or earnest program of reform is applied is only simple economy.

PUBERTAL DEVELOPMENT OF DELIQUENT BOYS

Pre-pubescence—60 per cent.

Pubescence—20 per cent.

Post-pubescence—20 per cent.

Sexual acceleration—23 per cent.

Sexual retardation—51 per cent.

While individual study reveals a few cases of premature and super-development along sex lines the tendency seems to be toward retarded sex development.

SEX HISTORY

Onanism:

Solitary—81.

Mutual—10.

No evidence—9.

In the case of the younger boys the act consisted in abortive attempts, but in 36 per cent masturbation with orgasm was regularly practiced.

Aberration:

Sodomy—3 per cent.

Other perversions—1 per cent.

The question of physical retardation and acceleration presented itself as follows:

Percentage physically accelerated:

1 year—14 per cent.

2 years—3 per cent.

3 or more years—2 per cent.

Percentage physically retarded:

1 year—15 per cent.

2 years—18 per cent.

3 or more years—2 per cent.

Anthropometric curves were plotted on the basis of Dr. Smedley's tables and included height standing and sitting, weight, dynamometer records, right and left, and vital capacity.

MENTAL CONDITION

General classification according to intelligence (100 initial cases): (Stanford Extension of the Binet Scale was employed as the most satisfactory single instrument now available.)

Superior intelligence—2 per cent.

Average intelligence—31 per cent.

Dull normal intelligence—21 per cent.

Border line deficiency—35 per cent.

Feeble-minded (all of moron grade)—11 per cent.

Classification according to types and personalities:

Feeble-minded (stable type)—3 per cent.

Psychopathic feeble-minded—8 per cent.

Epileptoid constitution—6 per cent.

Psychopathic (unclassified)—28 per cent.

Adolescent instability—27 per cent.

Aberrational (questionable)—2 per cent.

Mixed types—26 per cent.

Such an attempt at classification by types has its evident defects and is, in the main, of questionable import.

SPECIAL PSYCHOLOGICAL ITEMS IN REFERENCE TO THE FOREGOING CASES

With poor auditory memory—34 per cent.

With poor visual memory—25 per cent.

With poor power of memory and recall—26 per cent.

With tendency to uncontrolled behavior—45 per cent.

On the basis of fifty additional cases admitted to the institution during the last year we find no reason to alter greatly our opinions on the findings on the initial 100 cases. The percentage of cases of diseased tonsils, nasal obstruction and defective vision and discharging ears has been raised somewhat above that obtained for the initial 100 cases, and we have had a case of epilepsy, one of congenital syphilis, one of tuberculosis of the hip-joint and one case suspicious of pulmonary tuberculosis. Embryological defects such as hypospadias and hernia also occurred. There is an increase in the number of feeble-minded children and children of superior intelligence admitted to the institution in the additional group of 50 cases.

Facts of general sociologic and eugenic significance in the consideration of cases were gathered, and included significant information in reference to disrupted home, drunkenness, drug addiction, illegitimacy, insanity, invalidism, sex perversion, prison and reformatory records, epilepsy and feeble-mindedness; but the consideration of these matters in relation to the cases does not fall under a brief statement such as I wish to make upon the subject assigned. Such study is being carried on in an admirable way and by a staff of trained specialists at the Whittier State School, California, with Dr. J. Harold Williams as Director of Research. Other reformatories must develop the same kind of equipment and must develop their case histories in a scientific fashion. We wish to rate neighborhood conditions in reference to these cases along the lines suggested by Dr. Williams; and this should form a valuable and instructive phase of the "field-work" which we greatly need to round out our studies at Berkshire.

As a result of complete examination definite recommendations to the superintendent and his staff are possible, and detailed records of individual boys are formulated as a basis for the proper projection of the educational and disciplinary program of the institution. We plan to report upon these cases under the following heads:

Bulletin 1, which places in the hands of the Superintendent lists of boys that suffer from remedial physical defects and carries suggestions in reference to their correction.

Bulletin 2, which sets forth a classification of the boys from the standpoint of intelligence.

Bulletin A, which is a statistical summary of the results of the physical and neurological examinations, outlining the physical problems that call first for consideration in the application of reformatory methods.

Bulletin B, which is a statistical summary of the results of intelligence tests; along with Bulletin A it comprises a brief synopsis of the Berkshire survey and should be of informative value to the managers of the Farm and to the various agencies that commit cases to the Farm.

Bulletin 3, requiring a more extended analysis of the mental examination plus the application of additional psychological tests, which when complete for each case will constitute helpful aids to officers and teachers in the proper training and management of the individual boy.

GENERAL SUMMARY

Let us face what we have at this particular institution:

At least 12 per cent of the boys are feeble-minded; 10 per cent follow perverted sex practices; 16 per cent have defective vision; 51 per cent suffer from sexual retardation; 35 per cent are physically retarded. There are 66 per cent psychopathic, epileptoid constitution, aberrational, etc.

A very large percentage are of such dull intelligence, complicated with emotional instability that they are rendered unfit to profit by the ordinary methods of a reform school and require a special program of treatment drawn up along physical, industrial, social and recreational lines with provision for a maximum of hand-work.

Abnormal nose and throat conditions, secondary middle ear infection, decayed teeth, are more common amongst delinquents. Defective vision is less common. Embryological defects and stigmata of degeneration are more common amongst delinquents. From five and one-half to twenty times more delinquent children are feeble-minded than public school children of the same age.

It is interesting to note that the occurrence of 11 per cent of feeble-minded boys in this reform institution has focused the attention of the management, composed of keen business men, upon a very pressing need. This institution is not unlike many others that have been

organized for the purpose of reforming the offender but are doomed to failure in 10 per cent to 40 per cent of the cases because of the single element of mental deficiency which is presented. With the organization of psychiatric laboratories in connection with committing agencies, particularly courts, there should be no feeble-minded delinquents committed to reform institutions. As a matter of fact, however, trained workers agree that our reformatories are housing variable percentages of feeble-minded persons upon whom the reform program is expended with unsatisfactory results and at an expense all out of proportion to the end achieved. Under our present committing laws and with the handicaps faced by the average judge in dealing with these cases we shall probably continue to have feeble-minded children sent to our reformatories for the next couple of years, at least. We must face the need of some sane method of handling these charges in the reform school with the least complication of the administration of the work with other types under care. At Berkshire a start has been made looking toward a separate consideration of these cases until such time as the supply may be diverted at the proper point; namely, when the offender appears in court. These plans have not been fully developed at this writing, but in general and in brief we might say that the treatment of the feeble-minded group in a reform institution need not be the most troublesome problem faced by the institution. A certain number of the feeble-minded delinquents are of more or less stable type and fit into the life of a reform school fairly well, provided proper activities are supplied and a proper understanding of the feeble-minded child exists on the part of the teachers and officers of the school. It is needless to say that the feeble-minded group should be separated from the rest of the institution for instruction as well as detailed living and occupation. The unstable feeble-minded group, which is very much larger than the stable group, together with the border-line cases, contributes greatly to the disorganization of the institution and supplies a considerable number of the "runaways" and the list of cases of particular concern to the teachers of school-room subjects. The first step in the treatment is a correct diagnosis of the limitations, capabilities, etc., of the individual case and a clear understanding of such a summary on the part of the various officers handling the case. In dealing

with the unstable feeble-minded delinquent the institution officers must have in mind the same set of principles that form the back ground for dealing with the boy of emotional instability but of a grade of intelligence above feeble-mindedness. We are just beginning to realize the possibilities of proper grouping of cases in our reform schools so that the children of a particular personality shall receive certain stimulation from associations with others of a particular personality, which facts we may develop from individual case studies. The spirit of these methods must be put into force in relation to the instruction, discipline and management of the various groups under reform conditions. We hope to have some interesting results to report in the course of the next year in regard to the management of specially selected groups at the Berkshire Farm, and amongst these the feeble-minded group stands perhaps as the most evident problem. Even in the short time since the initiation of our studies at the Farm the Superintendent, always alert to note the effect of disciplinary measures, has pointed out several concrete cases illustrating the satisfactory reaction of "problem" boys to a selection of companions and work in accordance with the results of psychological study.

Reform institutions should exist roughly for three purposes:

1. To restore the erring one to a life of usefulness.
2. To secure permanent disposition of the cases and to add to the sum total of human progress.
3. To be laboratories for the study of errors of conduct so that society may profit.

Courts unprovided with psychiatrists and hampered from lack of proper institutional facilities and committing laws will continue to send feeble-minded children to reform schools for some time to come; but one of the best ways to open the eyes of law makers and committing agencies to this fact is by the reform schools recognizing these cases and refusing to complicate their administration by keeping them and attempting the impossible in correctional treatment. The truth should be faced and we should know what manner of boys have been sent to our reformatories. Our recommendations in reference to a number of older feeble-minded boys bring us face to face with the need of definite supervision and special training for such cases outside existing state institutions. The need of provision for place-

ment and supervision of the high-grade defective, whether he be a delinquent or a potential delinquent is a pressing one. As Dr. Victor Anderson in the recent report to the New York State Commission of Prisons on mental disease and delinquency pointedly says: "The existence of mental disease and various mental defects in a fairly large proportion of the inmates of prisons and reformatories makes clear how futile it is to merely go on blindly administering the law instead of endeavoring to solve the problems these individuals present. A similar situation in treating disease would consist in sending all sick persons to hospitals to be given the same treatment, fixing in advance the length of time they were to remain and then sending them out without any reference to whether they were well or not. The mere knowledge of the existence of these conditions is not enough; such knowledge should be made the basis for treatment. Constructive effort should be made to rehabilitate these persons in the light of the needs of each individual person; not only of his disabilities but of his capabilities and his adaptabilities." It is needless for me to quote the percentage of the various abnormal physical and mental conditions amongst delinquents tabulated by various investigators; they all tell practically the same story. Our little contribution agrees in the main with the others, with added conclusions to which I have specially referred.

ILLUSTRATIVE REFORMATORY CASES.

Case 128: Physical and Neurological Condition: This boy has what is probably an early tuberculosis of the left hip joint. He has a left ruptured ear drum with defective hearing and a discharge of pus; he also suffers from nasal catarrh and a lateral curvature of the spine. He has slight disturbance of the sense of taste. Circumcision is indicated. Masturbation with orgasm has been established and he has the sex development of a boy older than—that is, he is sexually accelerated about two years. His tonsils are diseased and the left cervical lymph nodes are enlarged. He has eczema of the face.

Wassermann Reaction: Negative.

Psychological: He ranks as a case of borderline deficiency very close to the feeble-minded group if not actually within it. His auditory memory is poor and he has little power to plan or to appreciate the point to a situation. He is very discouraging material from the school standpoint. He shows marked tendency to uncontrolled behavior (running away, etc).

Developmental Data: He was in the New York Juvenile Asylum for nearly two years for "incurability", the parents having made the complaint. He wanted to go to work and was truant from school and the

Court sent him to the Farm. He is an only child. The father is in the Navy.

Summary: Tuberculosis of hip joint; defective hearing and discharging ear; lateral curvature of spine; nasal catarrh, borderline intelligence; tendency to uncontrolled behavior; masturbation with sexual acceleration.

Prognosis: Because of his tuberculosis hip he would naturally become a case for hospital care, and with the necessary appliances would be rendered a semi-invalid for a period of perhaps two years. During this time he would not be in a physical condition to profit from the life and activity of the Farm, and he is therefore, in my judgment, not a suitable case for the Farm to attempt to handle. From the mental side he is also a discouraging case for reform work.

Recommendations: He should be placed in a large institution which has facilities for classified hospital care.

Case 92: This boy has only light sense in his right eye and one-half vision in the left eye. He has a decayed six-year molar tooth, and circumcision is indicated. In the special sense field he is lacking in the finer discriminations of taste. His physical development is normal for his age. He masturbates regularly. He has no ability to plan and has but little auto-criticism. He has poor visual memory and deficient auditory memory and cannot be taught by precept. In the language field he has the development of an eight-year-old child in spite of his sixteen years. He has poor power of concentration and is irresponsible when confronted with an emergency or a new set of conditions. He cannot manage himself with prudence except under careful supervision. He will never be able to benefit by ordinary school work beyond an inferior level and will be slow to profit by experience. He is permanently arrested mentally at about the ten-year level of intelligence; and because of his unstable nervous reactions he should have custodial care with suitable manual work. At large in society he will only add to the burden of poverty, disease and crime.

Case 89: This boy is a case of borderline deficiency with psychopathic tendencies. Physically he has stooped shoulders and suffers from eyestrain. He should be circumcised. Although he is underdeveloped sexually he masturbates daily and suffers considerably as a result from nervous irritability.

He has defective color vision (red-green blindness) which must be taken into consideration in his school work. His auditory memory is poor and he is limited in his ability to plan. He lacks power of abstraction and school work should be approached in a concrete fashion, emphasizing visual memory in which line he is fairly good. He will not profit to any degree from experience and will probably repeat his mistakes frequently. He lacks the power to make adjustments from day to day with changing conditions and companionship, and should be closely watched and studied during

the next year or two for the first signs of adolescent insanity, attempting, however, in the meantime to bring him into a healthy relationship with his associates, and letting him feel the stimulus of adult personal interest and confidence. Facts of related social significance: A feeble-minded great-uncle and a feeble-minded sister; disrupted home life. The boy should remain at the Farm and be studied further.

Case 132: Physical and Neurological Condition: This boy suffers from a very bad visual defect and marked nervous instability. He is underdeveloped physically and has decayed teeth and nasal obstruction. He has a left ear that may discharge in winter weather. He is physically retarded more than two years.

Wassermann Reaction: Positive (four plus).

Psychological: He is a case of borderline deficiency. He is very unstable nervously and lacks the ability to stick to a task. He lacks ability to attend to a given set of instructions and will attempt to execute upon a vague impression and not because he has heard and understood instruction. He had but little power to plan and cannot reason from cause to effect. His visual as well as his auditory memory is poor and his power in the language field is very limited. He jumps at first conclusions on the strength of some one striking feature of a subject, and has little power of self-criticism. He does not examine any proposition in a critical fashion but reacts to primitive instincts. He has a marked overflow of nerve energy with weak attention but an engaging manner, superficial in type. He can best be reached through the sensorial side and an appeal to his own selfish instincts. Not much can be expected from him along abstract lines, nor is he open to the usual appeals to the sentiments to any degree worth while.

Summary: Defective vision; decayed teeth; nasal obstruction, discharging ear; borderline deficiency; nervous instability; syphilis.

Prognosis: Bad. Because of his syphilis and his low intelligence he is not a fit case for the Farm to expend its energies upon.

Recommendations: Because of the expense and the difficulties incident to the proper treatment of his syphilis it would be inadvisable to retain this boy at the Farm. Not much can be expected from him in the matter of educational or reforming treatment. He will probably be best disposed of in an institution for the psychopathic feeble-minded.

The following are the record blanks that we have drawn up for use at Berkshire. While for our own records we keep a general folder with typewritten history for each boy, we find the following blanks of very definite value, at the start of the work at least, in crystallizing and framing the material and in rendering our summaries definite and concrete to the Institution administration.

BERKSHIRE INDUSTRIAL FARM
CANAAN, N. Y.
(PSYCHOPATHIC DEPARTMENT)
INFORMATION BLANK

Concerning the family:

Father's Age: Nationality: Occupation:

If dead, the cause: Health:

Habits:

Mother's Age: Nationality: Occupation

If dead, the cause: Health:

Habits:

Miscarriages: Health during "term":

Living with husband?

If not, give circumstances:

Paternal Grandparents: Health:

Habits:

Maternal Grandparents: Health:

Habits:

Paternal uncles and aunts: Health:

Habits:

Maternal uncles and aunts: Health:

Habits:

Brothers: Health:

Habits:

Sisters: Health:

Habits:

Special sense defect in any member of family tree:

Hereditary defects of any kind in any member of family tree:

Court or institutional history of any member of family tree:

Family income:

Physical and moral conditions in the home:

Religious instruction:

Punishment by parents:

Neighborhood conditions:

Recreational facilities:

Parental desire and attitude in reference to child:

FAMILY CHART

Concerning the boy:

Name: Address:

Date of birth: Nationality: Offense:

Committing agency:

Previous arrests:

Available details of any past delinquencies, including his reaction to probation:

Date of arrival at Berkshire:

First child? Full term? Past general health:
 Diseases:
 Age began to walk: To talk? Age at which peculiar or
 abnormal conduct was first noted: Circumstances:
 Parental explanation of such conduct:
 Did boy ever or does he suffer from "fits"?
 Was he ever unconscious? State circumstances:
 Does he ever show automatic action, have spells of laughing or crying or
 periods when he is excessively demonstrative?
 Describe:
 Characterize his former companions:
 Who are his special companions since entering Berkshire?
 Is he active or indolent? Is he a leader?
 Is he fond of music? What sports does he enjoy?
 Degree of skill:
 What is his desire in reference to his future?
 Has he any definite plan?
 Kinds of work done before committment:
 Reliability:
 Work best liked at Berkshire:
 Work he dislikes:
 What are his habits?
 Is he: Obedient? Cheerful? Sullen? Erratic? Gluttonous? Careless?
 Unclean? Lazy? Timid? Truthful? Quarrelsome? Desirous
 of earning money? Astute or bargaining? Stubborn?
 (Under- Mischievous? Indifferent? Bitter? Egotistic? Depressed?
 score words Willing? Spiteful? Quick-tempered? Talkative? Quiet?
 that apyly) Selfish? Scheming? Generous? Tale-bearing? Vulgar?
 Untruthful? Deceptive? Excitable? Apathetic?
 Does he prefer to be alone?
 What does he read?
 Age when entered school: Grades passed: How many
 different schools? How many different cities?
 Cause of withdrawal:
 Opinions of former teachers and principals:
 Present school grade: Best record in: Poorest
 work in:
 Special abilities:
 Present teacher's estimate of his scholastic ability (Very inferior, inferior,
 average, superior, very superior):
 Disciplinary record:
 Punishment since at Berkshire:
 Reaction:
 Candor and social attitude:
 Does he destroy, steal or hide things? Details:
 Has he ever been a runaway? Details:

Has he used tobacco? Does he masturbate, or is he suspected
of any abnormal sex practices?
Reason for suspicions?
Does he wet his bed?
Does he bite his fingernails? Does he cry easily? Details:
Has he sudden "fits of temper"? Describe:
What is his reaction to the spirit of "team work" and group activities
within the institution?
Can he "speak a piece" or appear to advantage before an audience?
Is he fond of animals?
Has he any pets?
Is he "collecting" anything?
Is he cruel to smaller boys or to animals?
Give example and details:
Remarks:

BERKSHIRE INDUSTRIAL FARM

CANAAN, N. Y.

(PSYCHOPATHIC DEPARTMENT)

INDIVIDUAL RECORD BLANK AND SUMMARY.

Name: Nationality: Born: Date Examined:
Address: Mental Age: Intelligence Quotient:
Physical and neurological condition:
Wassermann Reaction:
Psychological:
Developmental and sociological data bearing on case:
Present Status:
Summary:
Prognosis:
Recommendations:
Subsequent observation, study and opinion:
Ultimate status of case:
Post-institutional record:

BERKSHIRE INDUSTRIAL FARM

CANAAN, N. Y.

(PSYCHOPATHIC DEPARTMENT)

EXAMINATION BLANK

Name: Age: Date:
Vision; R. L. Astigmatism: Eye fatigue; Color Vision:
Other eye conditions:
Ears: R. L.
Teeth:
Nose and pharynx:
Tonsils: R. L.
Skin and glandular:
Orthopedic:
Nutrition:

Respiratory:

Circulatory:

Pubertal development (pre-pubescence, pubescence, post-pubescence):

Genito-urinary:

Laboratory:

Wassermann reaction:

Other tests:

Stigmata:

Smell:

Taste:

Reflexes:

Speech:

Neuro-muscular coordination:

Nervous disorders:

Miscellaneous:

SPECIAL

Onanism?

Coitus?

Sex aberration?

Intelligence tests: Binet-Simon Scale (Stanford Revision): Basal Year?
Mental Age? Intelligence Quotient?

Porteus Tests:

Additional Tests:

Feature Profile Test

Cube Imitation Test

Instruction Box

Construction Puzzle (B)

Learning Test—Arbitrary Associations

Ethical Perception Test

Moral Reaction Test

Aussage Test

Information Test

Summary of

Reactions:

Anthropometric Measurements

Height Standing:

Height Sitting:

Weight:

AGE:_____

Right Grip:

Left Grip:

AVER. for AGE_____

Vital Capacity

On the other hand, cases could be given where the examinations revealed that the life of the Farm was exactly suited to the case, and where certain capabilities and disabilities could be indicated with recommendations for the proper handling of the boy.

Examinations have shown that the Farm has many boys who are of

such mental and nervous constitution that they cannot with justice be released from the institution until they are eighteen or more years of age and have passed beyond certain adolescent disturbances. This means that these boys, most of whom are motor-minded and will find their life work in some of the trades, should receive at the Farm during this extended stay adequate vocational and industrial training; such training is not at present offered at the Farm.

This necessitates a broadening and enriching of the program, including development along industrial lines and the beginnings at least of the trades if not considerable portions of them. This would constitute real vocational guidance with a chance to select and serve a part apprenticeship with credit such as is given in many of our city vocational schools. As a supplement to this there should be a "follow-up" bureau to secure transfers direct to the jobs, so that the boy is not dependent upon the weak moral and economic support of the home people after leaving the institution, which support has shown itself so entirely inadequate and unfit to guide and control and help the boy in the past. This "follow-up" bureau might also handle the "field work" so necessary in connection with the cases at the Farm from the standpoint of a full diagnosis in the individual case. Such a field worker could look up family histories and secure first-hand information about the boy's home conditions, social and neighborhood environment, heredity and history of delinquency previous to his coming to the Farm. These facts would help greatly in a scientific study of the kind of material that the Farm is being asked by the courts and various social agencies to deal with. This bureau could also "follow-up" the cases after they were placed in jobs and secure true and valuable post-institutional histories, thus helping to measure truthfully the results of the activities of the Farm in terms of boys restored to useful and worthy lines of endeavor.

In closing let us state that many needs are suggested by the results of complete examination of the delinquent boys in this institution. The chief arguments for such routine procedure as a definite feature of the program of any reform institution might briefly be indicated as follows:

1. Through such examination the institution is protected from the expense, waste of time and energy of attempting to handle as a re-

form case a boy who because of syphilis, gonorrhea, tuberculosis or other serious diseases may be an expensive and unproductive case upon which to expend the program of the institution; or who because of feeble-mindedness or epilepsy is classed from the start as an improper case for reform treatment and is later discharged into society. From eleven to at least twenty per cent of the boys now sent to the Berkshire Farm fall into these classes.

2. Such examination reveals the boys who are suitable subjects for a real reform program, and the analysis of the cases individually should result in definite recommendations of great value in measuring justice to the boy at the Farm in terms of school training, emotional appeal, disciplinary attitude, etc., and in helping the institution to individualize the boy and to get the best results in terms of improvement in conduct and development of character for the money and energy expended. This applies perhaps to from sixty to eighty-eight per cent of the boys at Berkshire.

3. The provision for such examination on the part of an institution is an evidence of the scientific attitude toward the children entrusted to its care in contrast to the old, sentimental, guess-work which frequently resulted in waste of money and effort and injustice to the child. The provision naturally answers an increasing demand on the part of committing agencies for a proper individualization of their charges; it assures these agencies that the findings of scientific research are being utilized for the benefit of the cases that they have placed in the institution, and that the institutional authorities are not "working in the dark" in reference to the daily needs of these delinquent boys.

4. Provision for such examination is a piece of constructive, social and humanitarian work the value of which cannot appear fully except after a period of several years. Scientific study of delinquents in institutions should result in a contribution to the knowledge in this field which should mean a large saving in money and energy for the institutions of this type, and which may well result in a worth-while modification of our reformatory methods and in a development of a program that, shorn of haphazard methods, trial and error procedures and blind following of custom, will secure a maximum of results because it will be based upon scientific truth—a program that will insist

upon a diagnosis before it wastes time, energy and money upon treatment. Honor and gratitude await the philanthropic men and women interested in the subject of delinquency who are first to insist that money spent in reform work is misspent when directed toward doing the impossible when known methods of determining the possibilities of a given line of procedure have not first been employed. Such persons today are going to insist that before we put money into a program to be applied to a group of delinquents we must know, so far as science can tell, what kind of material we have to work upon; if mental defect or disease renders certain individuals unable to profit from such a program then it is foolish to waste it upon them; and if others are able to profit then it is desirable that the best method of application shall be selected for each individual; these facts can be determined only by comprehensive study of the individual, and this line of activity should be the first to be insisted upon in any scheme or expenditure along reform lines.

AN INVESTIGATION OF MENTAL DEFICIENCY AMONG THE JUVENILE DELINQUENTS OF NEW YORK CITY

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The following investigation was made during the winter of 1918 for the purpose of discovering how many mentally deficient children (below the ages of sixteen) were in New York city institutions for delinquents and destitutes. The interest was especially centered upon finding out how many mentally deficient children were in institutions not intended for the feeble minded, but equipped for other types of cases needing custodial care. The survey was made in the interest of the Department of Charities then under the direction of Commissioner Kingsbury, and the final purpose was to determine whether one institution was most desirable for their care or whether special facilities in various institutions should be provided for mentally deficient children, should the number of them in institutions not suitably equipped for their custody, warrant such procedure. The problem of the disposition of these children has become pressing because of the fact that Randall's Island was too crowded to accommodate more of them, and even if it had not been, the difficulties connected with commitment and transfer made it appear that it might be desirable to equip several institutions to take proper care of the children, instead of making extensive enlargements at Randall's Island in order to accommodate them all.

In order to discover the number of mentally deficient children, it was considered both unnecessary and excessively expensive to give a mental examination to every one of the 24,000 children or more, in the institutions under discussion. The problem was therefore rather to get a fair sample of the cases as a whole. Since they consisted of children falling into different classifications according to sex, color, race and cause of commitment, it was decided to take a random sample of each one of these several classifications, and to make an estimate therefrom. Moreover, it was not the defective child alone that

was an object of study, but it was also of interest to the Department of Charities to know how many children of supernormal ability were in these institutions, and to know what was being done to give them the opportunity for advancement which their superior talents warranted.

Various estimates had already been made of the probable number of the mentally deficient children in these New York institutions. These former estimates, however, had been made upon studies conducted in other cities where the conditions were not the same, or had been based upon records made of the selected children in New York City who were sent to the various public school clinics for special mental examination. The department did not feel that it could ask for an appropriation or recommend changes without more substantial data. Therefore the following survey was undertaken, and the writer was commissioned to make it.

The main problem was to make the selection of children who should represent a fair sample of the whole number. The method employed was to take unselected samples of children from the various types of institution, and according to the classification already indicated, i. e. sex, cause of committment, race, etc. The children to be tested from each group were chosen according to the first letter of their names, and each of these was given a mental examination. From these results it was believed that an unbiased estimate was made, of the number of mentally deficient children in each group, and of the institutional cases as a whole. The only exception to the random selection was that no foreign born children were examined, none who had not attended the public schools, and none with any physical defect that might hinder their taking of the test. Furthermore, few were under the age of eight. All of these children were at this time attending the public schools maintained in the institutions by the school board. It was thought that by these various precautions the sample was unbiased within the homogeneous groups, and that those cases where the tests might be considered inapplicable, such as foreign born children not proficient in English, the very young, and the physically defective, were thereby eliminated.

The institution where the tests were carried out, and the number in each group tested are given in Table I. These samples included

34 of the 36 Jewish delinquent girls under 16 in the institutions, and 15 out of the total of 38 colored girls under 16 in the institutions. They were considered as representatives of the whole in the latter case, because, while the sample was small, no further cases in that category could be obtained.

TABLE I.

N. Y. Protectory for colored girls....	15	colored delinquent girls.
N. Y. Colored Asylum.....	69	colored destitute girls and boys.
N. Y. Juvenile Asylum.....	42	colored delinquent boys.
N. Y. Catholic Protectory.....	34	white non-Jewish delinquent boys.
Home of the Holy Family.....	42	white non-Jewish delinquent girls.
Hawthorne Industrial School.....	40	Jewish delinquent boys.
Council Home Jamaica & Cedar Knoll	34	Jewish delinquent girls.
Brooklyn Hebrew Orphan Asylum....	60	Jewish destitute girls and boys.
Brooklyn Industrial School.....	72	white destitute non-Jew. girls boys.
Total.....	408	cases examined.

An hour or more was devoted to giving each child the Stanford-Binet tests. An effort was made not to tire the child unduly, and each child was given the tests in a room by himself. The usual classification by means of the Intelligence Quotient was employed.

The same standard of intelligence was adopted as that recommended by Terman.

Above 1.41, "Near Genius." 1.21-1.40, very superior intelligence. 1.11-1.20, superior intelligence. .91-1.10, normal or average. .81-.90, dullness. .70-.80, border-line deficiency. Below .70, definite feeble-mindedness.

The object was to select those children who had such a degree of mental inferiority that special training would most benefit them. The same standard was therefore adopted as that used for admission to Randall's Island, i. e. an Intelligence Quotient below .70. Moreover to make the results as conservative as possible border-line cases were not considered.

The following facts came to light as a result of the investigation, based upon the results in the table which follows. Some of these facts corroborate what has been found in investigations of a similar type elsewhere.

Among delinquent girls, a higher per cent of mental inferiority was found than among delinquent boys, due probably to the difference between the causes for their commitment. The girls were committed largely for sex offenses and moral lapses indicating weakness, whereas many boys were committed for offenses against property and city ordinances, often entailing considerable ingenuity and enterprise. This higher percent of mental inferiority is noted among all the classes of delinquent girls, whether colored, Jewish or non-Jewish. The fact was further illustrated by the result that there was no appreciable difference between the percent of mental inferiority among the destitute girls and destitute boys. The phenomena therefore seems to be one of type of delinquency rather than of sex.

Another result which only substantiates other studies in the same field, was the difference between the mental abilities of those committed for delinquency and those committed for destitution. About 8 per cent of the colored destitute children were mentally inferior, 4 per cent of non-Jewish white children, and none of the Jewish destitute were found to be feeble-minded. Contrast this with 46 per cent mentally inferior colored delinquent girls, 16 per cent colored delinquent boys, 17 per cent Jewish delinquent girls, and 10 per cent Jewish delinquent boys, and the 26 per cent and 23 per cent white non-Jewish delinquent boys and girls respectively.

The next result to be noted was the difference between the intelligence of the groups according to their classification as white-non-Jewish, Jewish, and colored. This difference maintains throughout both the delinquent and destitute groups, and between the two sexes. The results showed that the Jewish children in New York institutions have less mental inferiority than the non-Jewish whites and that the non-Jewish whites have less feeble-mindedness than the negro children. Whether this is due to difference of race or to natural selective processes, the writer does not venture to draw a conclusion. However, it should be remembered that the selective processes that had placed these children in institutions, such as poverty and delinquency, had acted to a large extent in a similar manner, upon each group, and while in the institutions the method of schooling had been standardized by the city school system. Thus the selective forces from the standpoint of racial differences, had tended to act alike on all groups both before and after their commitment. It

is possible, however, that the causes which brought them and their families to New York had been in themselves selective, and therefore account for the results.

If those children having an Intelligence Quotient of 1.21 or more are considered super-normal, it will be seen by consulting the table that only among the Jewish boys were any super-normal delinquents discovered. On investigation it was found that both these boys had been committed for ingenious offenses against property. The more talented of the two having organized a gang of boys who stole fire extinguishers and then went from house to house showing that the differences in insurance rates would more than repay the price they were asking for their article.

Among the destitutes a large number of very superior children were found, and particularly true was this among the Jewish children—20 per cent having Intelligence Quotients above 1.20. Contrary to expectation the examination of the colored children showed that about 11 per cent could be considered supernormal. Indeed, one colored boy ten years old had an Intelligence Quotient of 1.60. He was not a “freak” or odd in any sense, and his teacher told the examiner that he was the leader of the other boys in the institution. He was in grade VII at the time and the teacher said that grade VIII would not be too difficult for him.

The problem of special training for the supernormal was more or less solved in the institution by advancing the child in school grades. However, one of the Jewish delinquent boys of superior abilities was found to be in a grade not commensurate with his superiority and when inquiry was made as to the reason for his apparent retardation it was found that the principal having had some disciplinary trouble had demoted him as a possible solution. It was suggested that because of his superior mentality he should be advanced rather than demoted. This suggestion was adopted and according to a report three months afterward he had risen two grades and a half and his conduct was exemplary.

Having determined the percentage of mental inferiority in the different groups, and noting that these differ widely, the next problem was to estimate the number of such mentally defective children in New York City institution from the samples which had been tested. The total number of children in each group was found from

TABLE II.

No. of children under 16 yrs.	N. Y. institu- tions	No. tested from each group.	I. Q. below .70 Defec- tive.	71-.80	Border- line	.81-.90	Dull	.91-1.10 Normal	1.11-1.20 Superior	1.21-1.30 Very Su- perior.	1.31- NearGen- ius	Percent. Probable age De- fective	Defectives Estimated number in N. Y. Inst.
Delinquents—													
Colored girls	38	15	7	6	1	1	1	7	0	0	0	.46	17
Colored boys	179	42	7	10	16	7	2	12	0	0	0	.16	28
Jewish girls	36	34	6	7	8	8	1	19	1	0	0	.17	6
Jewish boys	395	40	4	4	9	9	2	19	2	1	1	.10	39
Non-Jewish:													
White girls	401	42	11	11	6	11	3	11	3	0	0	.26	100
White boys	1975	34	8	14	8	3	1	3	1	0	0	.23	450
	3024	207	43							1	1		
Destitute—													
Colored girls-boys	706	69	6	7	15	27	7	27	7	5	2	.08	55
Jewish girls-boys	3314	60	0	0	11	23	14	23	14	8	4	.00	00
White non-Jew- ish girls-boys	15638	72	3	7	25	31	5	31	5	0	1	.04	625
Destitutes	19658	201	9							13	7		1320
Delinquents	3024	207	43							1	1		Total Estimated Defectives.
Total	22682	408	52							14	8		
% Defective													
Delinquents:													
Colored girls			.46	.40	.07	.07	0	.07	0	0	0		
Colored boys			.16	.24	.38	.16	.06	.16	.06	0	0		
Jewish girls			.17	.20	.23	.37	.03	.37	.03	0	0		
Jewish boys			.10	.10	.22	.47	.05	.47	.05	.03	.03		
White non-Jew girls			.26	.26	.15	.26	.07	.26	.07	0	0		
White non-Jew boys			.23	.41	.21	.12	.03	.12	.03	0	0		
Destitute:													
Colored boys and girls			.08	.10	.20	.41	.10	.41	.10	.09	.02		
Jewish boys and girls			.00	.00	.18	.39	.23	.39	.23	.17	.03		
White non-Jew boys-girls			.04	.09	.35	.43	.07	.43	.07	0	.02		

the records of the institutions where they had been committed, and was multiplied by the percent of defectiveness found in the different samples.

Table II shows the results of the survey. It will be noted that the table contains the actual numbers of children in each group according to the above classification, the numbers selected from the group for mental examination, the number and percent which were found at different grades of intelligence, the probable error in percent, and the estimates made therefrom as to the probable number of low grade children, so far as intelligence is concerned, in the New York City institutions.

It will be noted that this estimate of around 1300 is rather conservative on the whole, for borderline cases according to Terman's classification have not been included, although Randall's Island accepts many borderline cases for special training.

Although all the children in New York City institutions are examined regularly by the Health Department as to their general physical condition, this examination is very perfunctory as regards mental rating, and not being trained to detect mental inferiority, nor especially interested in it, the doctors discover only a small proportion of the children who would be classed as mentally defective by means of mental tests. However, a result of their hurried diagnosis of 19,000 children in those same institutions, they did actually place 146 as mental defectives, 5 idiots, 29 suspected of feeble-mindedness, and 33 mentally lacking, making a total of 213 mental defectives out of 18,000 in New York City institutions for destitute and delinquents under 16 years, or about 24 per cent of the estimate of our survey. Although the inferences from the present study were very conservative, and it is probable that there was some error due to variation in the sampling, the difference between our estimate of approximately 1300 mentally defective children out of a total of 23,000, and theirs of 216 out of 18,000, is sufficiently striking to indicate that doctors not trained nor particularly interested in mental examinations had not been adequate to cope with the problem of the feeble-minded child in the New York City institutions. Moreover the authorities of most institutions do not realize the seriousness of the problem, for they become accustomed to a low grade of intelligence, and do not have a chance to make comparisons with the normal child. On the

other hand, in the Jewish institutions, where the intelligence of the children was on a higher level, the experience of the examiner showed that they were quicker to detect the subnormal child.

On the basis of the foregoing survey, it was maintained that there were enough children in need of special instruction to warrant special facilities for providing it. Moreover because of peculiar political and religious elements in the New York situation as regards city institutions, it was recommended that these facilities be provided by the Department of Charities for the Catholic, Protestant, Jewish and Colored children separately, rather than by enlarging the plant at Randall's Island to accommodate them all.

THE PROPORTION OF MENTAL DEFECTIVES AMONG JUVENILE DELINQUENTS

EDGAR A. DOLL

Psychologist, New Jersey Department of Institutions and Agencies

An explanation and apology is due the readers of this Journal because of my failure to submit to the editor of the Journal the manuscript of Parts III and IV of a series of articles on the above title submitted in collaboration with Mr. L. W. Crafts. (Cf. this Journal 1917.)

It should be explained that Mr. Crafts left the original copy of this series of articles in my hands for editorial revision and that the editor of the Journal undertook to publish the manuscript in installments with the understanding that these installments should be in his hands in such time as to permit of a continuous series in the Journal. Unfortunately, the events of the summer of 1917 prevented the completion of the editorial revision of the manuscript. Mr. Crafts accepted a commission as lieutenant of cavalry in the U. S. Army, while I accepted a commission in the sanitary corps of the National Army. It was thus impossible for either of us to complete the manuscript for publication, although I should say in justification to Mr. Crafts that only a slight amount of editorial revision was necessary.

It is now too late to complete the publication of this series of articles. It will be recalled that Part III was to have dealt with a critical review of typical contributions on the subject, and that Part IV was to have dealt with a proposed plan of procedure for the psychological study of feeble-mindedness in relation to juvenile delinquents. The passage of two years' time renders the publication of Parts III and IV now improper and relatively valueless (except historically). The critical review would have covered articles written by pioneers in the field, and such objections as might now be made to errors of oversight in their early work would be highly out of place. The proposed plan of study comprised in Part IV of the original manuscript is also now out of date. The remarkable success of group tests in the Army and in some of the universities dur-

ing the past two years makes necessary new procedures in institutional surveys and clinical work. Moreover, the data and standards obtained as a result of psychological examinations in the Army make necessary a thorough revision of our concepts of what is average intelligence, what constitutes feeble-mindedness and particularly the limitations of intelligence ages as diagnostic of high-grade feeble-mindedness.

In an article soon to be published in this Journal I am submitting the thesis that in the light of recent data, particularly those obtained in the Army, it is now improper to consider 16 years as the upper limit of average mental growth. It seems more accurate now to conclude, at least for the present, that 13 years and not 16 should be used as the upper life age of mental growth. If this thesis can be substantiated, then all previous work on Intelligence Quotients classification of cases over 13 years of age becomes subject to recalculation, and the conclusions based on such Intelligence Quotient distribution of juvenile delinquents become at least to some extent invalidated. In this article I also submit that the range of intelligence ages comprised between limits of 8 and 12 or 13 years, constitutes a borderline zone with respect to feeble-mindedness, and that within this range feeble-mindedness cannot properly be diagnosed on the basis of Binet mental ages.

These two facts radically alter the present value of the original manuscript of Parts III and IV of "The Proportion of Feeble-mindedness among Juvenile Delinquents." I do not feel able at the present time and with my present duties to undertake the complete revision of this unpublished manuscript. In place thereof I plan to submit to the readers of the Journal the above-mentioned article on the "Limitations of the Intelligence Criterion of Feeble-Mindedness" in lieu of Part III, and in place of Part IV a detailed outline of procedure for the psychological investigation of juvenile delinquents.

For these reasons I request the indulgence of the editor and readers if the Journal in not submitting the intended manuscript for Parts III and IV, and with their permission will consider the series concluded with this apology and explanation.

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No. 5

RESEARCH WORK IN NEW JERSEY

Commissioner Burdett G. Lewis has been authorized by the State Board of Control of Institutions and Agencies of the State of New Jersey to institute a program of psychiatric and psychological work that is of special interest to educators and criminologists. It is planned immediately to conduct psychiatric and psychological examinations in all State correctional institutions and ultimately to extend the work to the other institutions and agencies under the jurisdiction of the State Board. The work will be under the general supervision of Dr. Henry A. Cotton, Medical Director of the New Jersey State Hospital, as Acting Director of the Division of Medicine and Psychiatry of the Commissioner's Staff. The immediate direction of the psychological work of the Division will be under the supervision of Dr. Edgar A. Doll, formerly Research Psychologist at the Training School at Vineland. All entrants at the correctional institutions will be given a psychiatric test and the Army Group test. It is also planned, as far as possible, to use the clinical procedures and tests developed in the Army for the psychological examination of recruits.

The Army Group Test Alpha, has already been applied to nine hundred men in the New Jersey State Prison, and five hundred public school children of Trenton. It is planned that the psychological examinations shall be the basis of classification for the educational, vocational, industrial and parole activities of the correctional institutions of the State. The administrative policies of the several institutions are being re-organized on the basis of the psychological results thus far obtained. The work of the Division of Medicine and Psychiatry will be brought in immediate contact with the Division of Education and Parole and the Division of Labor and Agriculture, of which Mr. Calvin Derrick and Mr. David I. Kelly are the respective directors. Dr. J. M. McCallie, Assistant Director of Education and Parole, who has made some extensive researches in the field of applied psychology, will assist in co-ordinating the educational work of the institutions with the educational work of the public schools through the use of these tests. It is planned to extend the plan of work as rapidly as possible. Results thus far obtained are very promising, and indicate that there is an important relation between psychological diagnosis and classification, and institutional management and administration.

ERRATA IN DR. WALLIN'S ARTICLE ON THE VALUE OF THE INTELLIGENCE QUOTIENT FOR INDIVIDUAL DIAGNOSIS (THIS JOURNAL, MAY, 1919)

A transposition of figures appeared in this article in Table I, page 116. The last nine columns of lines 6 and 7 should be corrected to read as follows:

Category	Stanford ages			Retardation in years			Intelligence Quotients		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Bor'line and Pot. F. M.	7.53	7.17	7.43	3.06	3.27	3.11	.70	.68	.70
Diagnosis deferred	5.01	6.71	5.52	2.87	3.13	2.95	.73	.67	.71

PERIODICAL LITERATURE

ANDERSON, V. V. and LEONARD, CHRISTINE M.: A STUDY OF THE PHYSICAL CONDITION OF ONE THOUSAND DELINQUENTS IN COURT. In a group of 1000 men and women, 66.8 per cent were in good or fair health and 34.2 per cent were in poor or bad health, and in such physical condition as to warrant urgent medical treatment. There is a close correlation between the physical condition and industrial efficiency of these delinquents. In fact, it is so high that "really successful probation presupposes a knowledge of the physical condition of the delinquent in advance of his treatment." In a group of 600 consecutive cases, 47 per cent were suffering from either syphilis or gonorrhea or both. Of the offenders against chastity, 57.4 per cent had one or both diseases; other types of offenders such as those arrested for drunkenness, larceny and possession of drugs showed a range from 33 per cent to 53 per cent, indicating that these two diseases are not restricted to any one type of special offender, but are common among all classes of delinquents.—*Journal of Criminal Law and Criminology*, X-1, May, 1919, pp. 82-90. W. W. C.

ANDERSON, V. V., M. D., MENTAL DISEASE AND DELINQUENCY.—The recidivist is the real problem in the prevention of crime, and in him we have failed to accomplish what we set out to achieve. Probably the most important underlying causative factor in this failure to profit by such experience is the defective mentality by which the recidivist is so commonly handicapped. The following recommendations are made for the better handling of potential recidivists. All felons, and others to be selected by the court, be sent to clearing houses for observation, and after a period of reconstruction and study be distributed to institutions in the light of the needs of each case. The establishment of additional institutions for caring for specialized and segregated classes. All delinquent children brought before the court should be examined mentally, and if found to be feeble-minded, should be placed in suitable institutions. Adequate mental clinics should be established and these should be supervised and directed by a state board.—*Mental Hygiene*, April, 1919, Vol. III. No. 2. H. P.

BLAKE, KATHERINE DEVEREAUX: HOW TO TEACH CHILDREN TO RESPECT THE RIGHTS OF OTHERS. The answer is "respect their rights." The rights of life, liberty and the pursuit of happiness are not provided for children, and until the conditions causing neglect of constitutional right are obtained, we can not expect the best results. As far as public schools are concerned, individual treatment and training of boys and girls of today to be right-minded fathers and mothers will reach the parents of the next generation, and start us on the road toward teaching

the child to respect the rights of others.—Ungraded, IV-7, April, 1919, pp. 172-175. W. W. C.

CORSON, DAVID B.: THE CHIEF PROBLEM IN THE EDUCATION OF DEFECTIVE CHILDREN. Idiots and lower grade imbeciles cannot be equipped for industrial training; training will be increasingly satisfactory as the pupils approach the normal. The special class of homogenous grading can and does equip pupils for industrial employment by the use of carpentry, weaving, basket making, chair caning, laundering, dress making, gardening, cooking, house cleaning, sewing, waiting, cobbling and shoe blacking. Very few pupils enter the trades or occupations for which the school prepares them but certain habits are acquired which prove useful and train in a general way for industrial work. Employers of the feeble-minded need to be educated to understand the feeble-minded worker. The right educational policy calls for the establishment of school centers equipped for the special work, to give special sense-training, wide "experience training", and shop training in commercial establishments with intelligent supervision and guidance. For those lacking the ability or the opportunity to profit by such an organization, the State should maintain farm or industrial colonies, providing both supervision and training for self-support.—Education XXXIX-5, January, 1919, pp. 292-298. K. M. C.

EDUCATIONAL EVENTS: JUVENILE CRIME IN MANCHESTER. About two years ago a pamphlet was published describing the terrible conditions under which Manchester children live. Further investigation of 100 juvenile offenders dealt with in 1915 was undertaken. The memorandum shows the results of events due to parental incompetence: home neglect, physical discomfort, malnutrition and disease, mental retardation, distaste for school, truancy, wandering, mischief, breaking in, and theft. The death rate in Manchester among children under 14 years of age is about 50 per cent more than it should be, and 90 per cent of these are under five years old. Incapable, criminal, vicious and careless parents are described. Reform among juveniles must to a large extent have its basis in the improvement of physical condition. Children who are physically miserable cannot be taught and should be taken from the custody of incompetent parents. A number of special residential schools should be provided, governed centrally by the Board of Education. Willing but incapable parents should be assisted by welfare committees. A statutory duty should be placed upon all educational authorities to deal with the children of imperfect status in the area.—School and Society, July 5, 1919, pp. 13, M. S. C.

FITTS, ADA M.: MENTAL DEFECTIVES IN INDUSTRY. The feeble-minded child is already receiving special attention in the schools. Following this consideration is the question, "Have they a place in industry?" Work in canning factories has been done by feeble-minded under supervision. Twenty occupations are listed as suited to the abilities of this class. Manual, domestic, gardening and other work calling for little skill and much repetition may be utilized in keeping the defective busy in useful activities. Training in special classes, "trade classes", and after-care so

administered that the subjects and their families co-operate, furnish the supervision and intelligent planning, which make self-support possible. Unless an educational policy fitted to the needs of the defective and borderline classes is adopted, they will continue to swell the ranks of the unsocial and criminal groups.—*Ungraded*, IV-8, May, 1919. K. M. C.

PEARL, RAYMOND: STERILIZATION OF DEGENERATES AND CRIMINALS CONSIDERED FROM THE STANDPOINT OF GENETICS. For many years interest has been shown in the possibilities of eugenic improvement of the race through sterilization. Operations on criminals and degenerates have been permitted in a few of the states. Some of our well known investigators have shown how many of our social misfits owe their condition to poor heredity, and if they in turn reproduce, a certain definite proportion of their offspring will be defective somatically and will in turn pass on to their progeny the defective germ-plasm. There can be no doubt that sterilization would be most effective. Sanction could readily be given to two classes: (a) those of both sexes who are obviously degenerate, (b) such persons of both sexes not obviously degenerate, i. e. somatically abnormal) as have one or more children degenerate. No results could be expected in less than thirty years. Whatever plan of preventing reproduction is used, it should be absolutely permanent and should include both sexes. The most widely approved plan is vasectomy, but there is a weak point in this due to the fact that it is possible to repair the work done so that fertility is restored. It is clear that unless the plan is thoroughly comprehensive in its scope and carried out for a period of a hundred years, no eugenic results will be reached. The difficulties are so many regarding sterilization as a remedial eugenic measure so as to make one doubtful of its accomplishing much.—*Eugenics Review*, XI-1, April, 1919, pp. 1-6. M. S. C.

STEARNS, A. WARREN: THE DETECTION OF THE POTENTIAL CRIMINAL. All crime is due to the operation of natural instincts—acquisitive, procreative and pugnacious, which lead to action not conforming to social regulations. Social conditions placing an individual at a disadvantage and the individual's personal characteristics must be studied in determining the causes of non-conformity. Among the individuals who cannot conform are the feeble-minded, those having abnormal personalities, the definitely insane, and the epileptic. Mental disease is often a cause of crime, first "because it handicaps the individual, prevents his competing with his fellows on equal terms, and so makes him a victim of economic necessity to a greater extent than the average man; next, his inhibitions are so weak or weakened that he is unable to resist the temptation to choose the make-shifts and short-cuts which lead to crime; and lastly, that certain anti-social tendencies which he may have form a positive force tending toward the commission of crime.—*Journal of Criminal Law and Criminology*, IX-4, February, 1919, pp. 514-519. W. W. C.

VIAL, SOLON C.: THE EFFECT OF THE WAR ON JUVENILE DELINQUENCY. For the effective treatment of the cases of juvenile delinquents, histories are necessary which reveal two sets of factors; first, those

which cannot be altered, such as hereditary traits, imperfect development and the level ability of the individual; second, those which can be altered, including such factors as repairable physical defects, home conditions, habits, companions and adolescence. War conditions are classed in the second group. In the United States, various localities report different effects of war in the amount of juvenile delinquency. Iowa reports a marked increased amount, although with more probationary activity, commitments have not increased. Increased discipline in the home seems necessary. Conditions of floating war population, easy money by questionable means and their attendant attractions have made parole supervision increasingly difficult. European conditions encourage the sustaining of the public school, child labor laws, and social work with boys.—State of Iowa, Bulletin of State Institutions, XX-3, July, 1918. K. M. C.

WALLIN, J. E. W.: MEASURES ENACTED BY THE MISSOURI LEGISLATURE FOR THE CARE OF DEFECTIVE CHILDREN. A number of beneficial bills were passed by the Missouri Children's Code Commission in 1919 in the interest of defective children. The new compulsory attendance law which requires full-time attendance of children between seven and sixteen years of age, also applies to feeble-minded, deaf, blind, and crippled children, where special classes have been provided. The special classes can be started in any district where there are ten or more children of each type. Where no special classes have been provided, the State Board of Charities and Corrections must provide for their training. New York and New Jersey are the only two other states where special classes for retarded pupils are compulsory. The commitment of the dependent, delinquent, criminal, immoral and feeble-minded is made compulsory after a court hearing and certification by a "competent psychologist or physician". The act for the enlargement of the colony for the feeble-minded and epileptic provides "as soon as the funds are available" for the segregation of epileptics in separate colonies, also the feeble-minded delinquents, prostitutes, children and other classes of inmates who for their own welfare should be segregated. A separate cottage for colored inmates should be built. Unfortunately, because of a lack of funds, all this cannot be immediately accomplished. The bill for the prevention of the marriage of the "insane, imbecile, feeble-minded and epileptic" was defeated by both houses. Several other good bills which were defeated will be reintroduced in the next legislature.—School and Society, July 12, 1919, pp. 55-57. M. S. C.

PUBLICATIONS RECEIVED

American Association for the Study of the Feeble-Minded. Proceedings and Addresses of the Forty-Second Annual Session, held at Buffalo, New York, May 31, and June 1, 1918. Published by the Association, 1918, pp. 195.

In addition to the regular reports and discussion of Association affairs, the Proceedings include seventeen original articles on different phases of the problems of the prevention of mental defect and the treatment of the defective, and comprises the Journal of Psycho-Asthenics, Vol. XXIII, September 1918 to June 1919.

American Judicature Society. Understanding the Criminal. Reprinted from the Journal of the American Judicature Society, October, 1918, Vol. II, No. 3.

A timely description of the work of the psychopathic laboratory of the Municipal Court of Chicago, under the direction of Dr. Wm. J. Hickson. The ghastly futility of mixing first offenders and hardened criminals in jails and prisons is pointed out and the problem of the recidivist recognized as necessitating a psychopathological solution. The place of the laboratory is particularly to pick out the defective at an early stage and put him where he cannot again fail. The potential criminal can be diagnosed with certainty before any serious offense has been committed. Cure comes too late, and the purpose of psychopathology is to determine in advance these enemies of society and shut them up before they have committed anti-social acts.

Athearn, Walter Scott. Professor of Religious Education, Boston University. Religious Education and American Democracy. The Pilgrim Press, Boston, 1917. pp. 394.

This volume outlines a system of education which correlates the activities of public and church schools, the problem being the organization of religious education in the American democracy. A resume of various methods of religious instruction is given and suggestions are made for the unification of educational agencies. A careful compilation of present methods, a constructive program of religious education, and a survey of literature involved are the valuable features of the book.

Baldwin, Robert Dodge. Manual for "Cheney System of Cumulative Class-Room Child Study". Department of Education, Washington State Normal School, Cheney, Washington, Bulletin C-W, No. 1, April 1, 1919.

A most commendable work in standardizing teachers' observations of their pupils has been accomplished in this manual. Adequate instruction is furnished so that even teachers who have not specialized in educational psychology or child training will be able to standardize their own and others' estimates of school children. Sample charts are included which provide space for recording systematized observations on physical development,

mental, moral and social development, the academic record, the attendance record, the environmental record, and a record of heredity. It enables the teacher to keep a complete record of the child, with the ultimate aim of educating the pupil to better advantage. This record, because it is standardized, becomes permanent, and may be passed on to other teachers.

Boston Children's Aid Society. Fifty-Fourth Annual Report, for the year ending September 30, 1918.

This report contains a careful analysis of the various problems relating to the care of dependent children which have arisen in the past year in this society. Child-placing in homes, preventive medical work, co-operation with other agencies, home libraries, financial problems of administration and the Boston community plan of public and private child-placing are among the topics discussed.

Christian, Frank L. A Study of Five Hundred Parole Violators. New York State Reformatory, 1918.

A careful analysis of the social and mental conditions of 500 consecutive parole violators is the basis of this report. Dr. Christian has classified the group as psychopaths, 23 per cent; epileptics, 11 per cent; alcoholics, 6 per cent; insane, 2 per cent; defective delinquents, 35 per cent; vagrants, 9 per cent; gangsters, 4 per cent and responsible offenders, 3 per cent. He has also classified them as normal, 6 per cent; subnormal, 76 per cent; custodial, 18 per cent. With reference to industrial capacity, he found 17 per cent capable of self-maintenance, 41 per cent semi-dependent and 42 per cent dependent; he has continued this group with consecutive admissions where he found 38 per cent self-sustaining, 42 per cent semi-dependent and 20 per cent dependent. The study is a valuable contribution to the meagre literature concerning recidivists and parole violators.

Hexter, Maurice B. Supt. of the United Jewish Charities. The Newsboys of Cincinnati. Studies from the Helen S. Trounstein Foundation, Vol. 1, No. 4, Jan. 15, 1919.

After analyzing and discussing the inherent motives, the economic status and social composition of the newsboy group, the writer considers the factors of delinquency, truancy and retardation, health, legal status of newsboys and administration of the law in newsboy service. It was found in Cincinnati as well as in other cities, about 70 per cent of newsboys live in normal homes. The vast majority earn less than \$1.25 a week and necessity is one of the least potent causes of newsboy service. It appears that delinquency is three and one-half times as frequent among newsboys as among all boys. The writer refers frequently to similar studies in comparison with Cincinnati and furnishes a statistical appendix, a bibliography and an index.

Los Angeles County. Annual Report of the Boys' and Girls' Aid Society for 1918.

A neat Report containing statements of the various officers of the Society and a list of the members is published by the Boys' and Girls' Aid Society of Los Angeles County.

New York State Hospital Commission. Thirtieth Annual Report, for the year ending June 30, 1918. J. B. Lyon Company, Printers, Albany, 1919, pp. 451.

This annual report presents a review of developments, legislation, policies, activities of state hospitals, and other related factors in the care of insane patients in the state of New York. At the end of the fiscal year, there were 37,352 patients in the civil hospitals, 1,420 in hospitals for criminal insane and 929 in private institutions; a total of 39,701.

Mercier, Charles. *Crime and Criminals.* Henry Holt and Company, New York, 1919, pp. 289.

This volume deals with the medical, biological and psychological aspects of criminal jurisprudence. Dr. Mercier is a well-known English authority and writer in this field. His method of discussion is to apply "common sense", based on his wide experience in studying offenders, to the various related problems; it is mostly deductive and an application of the principles of conduct in general to that of criminal conduct in particular. The chapter headings are: The Factors of Crime, The Psychology of Crime, The Nature of Crime, Kinds of Crime, Private Crimes, Family and Racial Crimes, Criminals, Kinds of Criminals, Prevention, Detection, and Punishment of Crime.

Reformatory at Anamosa, Iowa. Twenty-third Biennial Report.

This report is very commendable as a whole, but being principally composed of tabulated work cannot be taken up in detail. From each department is an account of the work accomplished in the past two years. Anamosa has 56 inmates who have served prison and penitentiary terms; 22 who were received when over 30 years old; 39 who have served terms in other reformatories; and 41 who had served terms in Eldora. This list unfortunately makes Anamosa a different kind of reformatory from the modern conception of today.

Slingerland, W. R. Special Agent, Department of Child Helping, Russell Sage Foundation. *Child Placing in Families.* Russell Sage Foundation, 1919, pp. 261.

This manual of child-placing, containing a complete study of this branch of social work, deals with the historical, theoretical, and practical aspects of the problem. Its purpose is to provide a text book for the guidance of those called upon to undertake the complex and delicate task of providing homes for dependent and neglected children. Part I indicates the historical and general basis of the work including legal considerations, varieties of child-placing organizations, mentality. Part II considers the technique of child-placing with reference to the reception of children, receiving homes and their functions, selection of family homes, selection and placement of children, and adequate supervision. Part III deals with special classes, including children of unmarried parents and juvenile war dependents, gives the arguments in favor of child-placing, and outlines prospects for the future. Part IV consists of appendices on terminology, definition of child-placing, laws and Supreme Court decisions, a model child welfare law, a selected bibliography and an index. The volume is well written by an authority and should

be in the possession of all social workers dealing with this particular problem.

Treadway, Walter L. and Lundberg, Emma O. *Mental Defect in a Rural County.* U. S. Dept. of Labor, Children's Bureau, Publication No. 48. Government Printing Office, Washington, 1919.

This report deals with the results of a study made in Sussex County, Delaware, through the combined efforts of the Public Health Service and the Children's Bureau. The economic status of 75 per cent of the cases was consistently low, and 53 per cent of the children were living in unfavorable homes. However, relatively few of the families are dependent on out-door relief. Approximately 0.95 per cent of the white children and 3.0 per cent of the colored children in the schools were mentally defective. Although these figures are not high, the demand for segregation and custodial care is apparent.

U. S. Public Health Service. *The Problem of Sex Education.* 1919.

The war made available definite, concrete evidence of the disastrousness of sex ignorance. Sex education is the means offered for solving this problem. Such instruction is best given from parents, by whom it may be continued during the entire adolescent period. However, the parents are often unsuited or unable to give such instruction when the need is most imperative, and this throws the responsibility for the matter upon the public school system. The instruction by this means must be carefully systematized and presented only by teachers especially suited and prepared. Instruction, however given, is most effective when accompanied by physical education and school yard games, with the opportunity to promote "sound attitudes toward clean living".

Vincent, George E. *The Rockefeller Foundation. Review for 1918.* The Rockefeller Foundation, New York. 1919.

A summary of the activities of the Rockefeller Foundation in 1918 is given in this pamphlet. The Foundation's aim is to promote "the welfare of mankind throughout the world". The activities described relate chiefly to public health work, medical education, research, war work appropriations, and financial statements.

Washington University. Saint Louis, Mo. *The Newsboy of Saint Louis.* Published by the Alumni Association of the School of Social Economy.

This study is a summary of an extensive investigation made by Miss Ina Taylor in 1910, regarding newsboy life and its effect upon the developing boy. Some of the features of the service in Saint Louis appear to the unfavorable working environment retardation and irregularity of attendance in school and meagre earnings. It has been found that while 10 per cent of all boys become delinquent, 60 per cent of these come from the street trades. Although it would not be expedient to prohibit the sale of newspapers by boys, their associations should be supervised and licenses and badges should be issued by the Board of Education in order to regulate the personnel of the trade.

Wrentham State School, Mass. *Twelfth Annual Report,* pp. 23.

This report gives the number of new admissions to the school as 166;

those already enrolled, 1200; and those on the waiting list, 600. There is an emphatic need for more equipment to adequately care for the inmates. It shows that the morons are entering much more frequently than in previous years, when only the lower grade types of feeble-minded were found. This necessitates more trades buildings. The parole work is being cared for by a social worker who has the supervision of 65 cases. The care of the defective delinquent in the feeble-minded institution is not found to be feasible, as there is too much fertile material for them to use in the form of the ordinary feeble-minded, who are at hand in large numbers. In closing the report the statement is made that there is a need for speedy development of another school at Belchertown.

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FEEBLE-MINDED RAPIST ELECTROCUTED

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On March 22, 1919, Mr. C. C. Menzler, Secretary of the Board of State Charities of Tennessee, and I visited the Davidson County jail at Nashville, Tennessee, to see Frank Ewing, a negro aged twenty, found guilty of the rape of a white woman, sentenced to be electrocuted and the sentence confirmed by the Supreme Court. Governor Roberts wished to know particularly about his mental condition.

Ewing was a short, stout, negro who looked to be about twenty years of age. He had a small head, a shuffling gait, and appeared to be in good physical condition. His own account of his industrial career indicated that he has been a vagrant. He has probably been supported almost entirely by his mother. His mother had claimed that he was feeble-minded.

He could write his own first name, but could not write his last name without a copy. When asked to write his name he produced a piece of paper from his pocket, after he had written Frank, and proceeded to copy therefrom Ewing. Someone else had written his name on this piece of paper.

By the Stanford Revision of the Binet-Simon tests, Ewing passed all four of the six-year tests tried; three out of four of the seven-year tests, (missing repetition of five digits;) five out of six of the eight-year tests, (being unable to count from 20 to 0); and failed in every one of five nine year tests which were tried; and every one of four ten-year tests which were tried.

Though this examination was not complete, we have reasonable ground for concluding that the mental age of this negro boy was approximately 7.6 years. It is hardly likely that a more thorough-

going mental examination would have given him more than an eight-year mental rating, or an intelligence quotient of more than .50. He was poorly oriented in time and in place. He could give the days of the week in order, but not the months of the year. He did not know when Christmas comes. He did not know the date. He gave the day of the week as Saturday. When asked what month it was he said at first he did not know, but a moment later when asked whether it was summer he said, "No, this is winter. This is March," which was correct. He could not read time by a watch. He named the common coins correctly, but could count only very small amounts. He did not know the value of coins above a dime. He was unable to count beyond twenty. When a quarter, two nickels, two dimes, and two pennies were placed on the table before him and he was asked to count the money, he put the quarter, two dimes, and a nickel apart and said that was fifty cents. When asked again how much there was altogether, he said forty-six cents. When two dimes, and two nickels were placed on a table and he was asked to count it, he counted forty cents. He said there were nine eggs in a dozen, two pints in a quart, four quarts in a gallon, and two pecks in a bushel. He had no idea how many pounds in a bushel of wheat, and when asked the price of a bushel of wheat he said \$4.00 or \$5.00.

He showed a very poor appreciation of the absurdities. Only one, the body of the girl cut into eighteen pieces, did he see through. He answered none of the fourth degree comprehension tests correctly.

This negro boy was picked up on suspicion of being implicated in the theft of a cow in the neighborhood where his mother lived in Nashville. The time of his arrest was several months after the rape of which he was found guilty. This rape occurred about four miles out of Nashville. A young farmer's wife was alone in her isolated country home, about the middle of a summer afternoon. The dogs began to bark. She went outside and a young negro was waving a piece of paper, indicating that he had a message for her. She quieted the dogs and went to the gate, thereupon he produced a knife, threatened her life, and under this threat accompanied her into the house and ravished her. He made his escape and she went to a neighbor's across the fields and was taken in an automobile to her husband. The husband accompanied his wife immediately to the home. He detected the odor of a negro in the room.

The alleged rapist was not tracked. Several negroes were produced, but none were identified until Ewing was brought to the house.

After Ewing had been arrested, it occurred to one of the constables that he might be the man wanted in this case. He thereupon got the boy some cakes, put him in an automobile a few hours after his arrest, and carried him out the pike toward the scene of this crime. He testified that the boy ate the cakes ravenously until they turned into the little by-road which led to the farm where the crime was committed. He immediately ceased to be interested in the cakes. This was taken as a significant evidence of his guilt. He was positively identified by the farmer's wife. The constable further testified that he knew which corner of the room the bed was in after he had visited the premises with him, although he had not been inside the house.

The boy was found guilty of the rape on this evidence,—the inhibition of his salivary flow as they turned into the road to the farm house, several months after the rape had been committed, his alleged knowledge of the interior furnishings of the room without again visiting the same, and the identification of the wronged woman.

A country squire in a neighboring county endeavored to prove an alibi for the boy, claiming from the evidence of his account book that Ewing was working for him the day this crime was committed. The squire, however, was not a very accurate book-keeper, and his evidence was not convincing to the jury. The boy was electrocuted in April, 1919.

CESARE LOMBROSO

PAUL E. BOWERS

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The new science of criminology owes its origin to the indefatigable efforts of Cesare Lombroso. He may in truth be called the father of criminalistics. No investigator before or since his time has given to the scientific world as much and as valuable data on crime and criminals as he. No book has been written on crime within recent years which does not pay credit to his genius. His most bitter opponents are compelled to admit the monumental worth of his labors. Though his name has become universal to social scientists I believe but little is known of the intimate details of his life either in Europe or America. I feel that it would be of great interest, to the American reader at least, to give a synoptical outline of his biography as I have gleaned it from, "Cesare Lombroso; Storia Della Vita e Delle Opere Narrata Dalla Figlia". (Caesar Lombroso; Story of His Life and His Work Written by His Daughter.¹)

Cesare Lombroso was born in Verona, Italy, November 6th, 1835. He was the son of Argonne Lombroso and Zefora Levi who were wealthy Hebrews coming of distinguished and ancient lineage. His parents lived with his maternal grandfather until this relative died. At the time of his grandfather's death his parents were visiting his mother's relatives at Cheiri. Cesare Lombroso who was then five years old was then entrusted to the care of his uncle, David Levi, with whom he remained three years.

David Levi taught him to read and write, gave him lessons in poetry and instilled into his childish mind thoughts and ambitions concerning liberty and politics which had a marked influence on Lombroso's character throughout his life. David Levi was especially interested in social and political questions and was a member of Mazzini's Society of "Young Italy".

His grandfather's death left his parents in reduced circumstances. They were forced to give up much of their former mode of living and

¹By Gina Lombroso-Ferrero. Bocca, Turin, Italy, 1915.

were compelled to take a small villa near Verona. After living with his uncle, David Levi, for three years he returned to his parents who sent him to a grammar school near their home. After completing his common school studies, he studied Latin, Greek, history, geography and mathematics under the tutelage of a Jesuit priest. He found mathematics an extremely difficult study and only by the greatest amount of effort did he succeed in this subject.

Cesare Lombroso was a very timid, sensitive and affectionate child; he did not care much for the company of other children and much preferred to wander alone through fields and woods reading aloud from a book. His first boyhood friend proved to be a great disappointment—a book which Lombroso was very fond of reading was lost and it was afterwards recovered at a second-hand book store. It had been stolen by his friend and sold to the book seller. It is said that this discovery was such a shock to the sensitive Cesare that it made him ill. The morbid thoughts of this act are credited with having stimulated Lombroso to discover the real cause of crime.

At the age of fifteen he began studying with Professor Sandri, a famous Veronese botanist. He was at this time very much interested in political subjects and agriculture and he wrote a "History of the Roman Empire" and "Ancient Roman Agriculture." These treatises revealed the nature of his mentality and his broad grasp and comprehension of the realities of life that were then rampant in Italy.

His early mental maturity is not so surprising when we consider his mental endowments, early training, and the period of political activity which existed at the time of his boyhood. Lombroso claims to have realized his individual personality at the age of four and his psychological self before he reached the age of fifteen.

When about twenty years of age he became acquainted with Paolo Marzolo, an accomplished scholar and prominent medical authority. Their friendship proved to be an inspiring influence that set the spark of his latent powers. In 1860 he was ready to enter the University of Pavia; this University being closed on account of the Revolution he joined the Literary Society of Verona which possessed a fine library and there he spent much time in study.

The University reopened in 1862. Lombroso entered as a medical student. He was guided in his choice by the advice of his intimate friend Marzolo and Dr. Panizza, a noted surgeon of Pavia. He would have preferred history or literature and his mother wanted him to

study law. He made many influential friends at the University and among them were de Mauri and Mantegazza; de Mauri was the Emperor's librarian and one of the greatest writers and scholars of his day. Mantegazza taught him physiology and was the first to arouse his interest in the study of the brain and the central nervous system.

He contributed a chapter to Mantegazza's book, "Physiology of Pleasure." This work done by Lombroso at the age of twenty-one was exceedingly comprehensive, scientific and mature for one so young in years.

After studying medicine for three years he had cultivated no special love for it. He used it merely as a foundation for broad culture and intellectual attainment. While still at Pavia he wrote an article on "The Relation of the Mind and Genital Organs of Animals" and at Padua he wrote a thesis on "The Works and Life of Cardano" which was by far the most important work he had done since he had written his "History of Rome". This last writing he dedicated to de Mauri and it was the nucleus for his later work, "Genius and Folly".

After a while Lombroso realized that medicine was a science with intrinsic worth for itself, and realizing its value he began to study it enthusiastically with a view in mind to do good for the sake of doing good. This motto he adopted for the regulation of his life. He then began the study of mental alienation and cretinism with the hope of discovering the causes and cure of these pathological conditions. Wishing to study these conditions he left the University of Vienna where he had been studying and returned to the University of Pavia in Italy. In the course of his researches on cretinism he traveled throughout Italy, wherever its traces were found, seeking its origin and cure. He spent four years on this work and drew many conclusions from many observations which were found to be correct by scientific and clinical research. His discoveries created a revolution in the study of hygiene and psychiatry. He graduated from the University of Pavia with highest honors in 1858. After graduating he returned to Verona.

The current political strife ended in war in 1859 and he felt it his duty to enlist. Although he wept at the thought of giving up his studies to become a soldier, he went to Milan and enlisted. He was appointed medical aid to the Sanitary Corps of Piedmont, to serve during war time only. Here he took up his duties in July, 1859.

While serving there he discovered that cotton soaked in alcohol prevented infection after amputations. For this he was awarded two medals. It was his intention to retire from the service at the end of the campaign in 1859 but he was induced to remain and was promoted to the office of doctor of a battalion of the second class. At the end of the war he began the anthropological study of the soldiers in the army, compiling data on their origin, size, weight and cranial measurements, etc., and he became so expert that he could tell at a glance where a man came from. He continued his studies on psychiatry and wrote on article. He was promoted in 1861, to a battalion of the first class. Army life did not appeal to him, and he was anxious to return to civil life to lecture on subjects of interest to him.

In 1860, he wrote to Masserani, President of the Society of Sciences and Letters in Milan, asking him to arrange a date for the discussion of three subjects; the relationship of genius to crime, the multiplicity of the human race, and the Italian race. Masserani was not very enthusiastic and delayed setting a definite date. In 1861, Lombroso wrote to Dr. Panizza, Rector of the University of Pavia, asking him to persuade Masserani to set a date. Panizza, instead of doing this, wrote inviting Lombroso to direct a course of psychiatry at the University. This was greater than Lombroso had hoped for.

During this period he was still connected with the military. His regiment was ordered to Calabria and anxious to study a new race he went with it. He began there a study of the methods of hygiene and medical practice used in the different parts of the country, which extended over three years. He sought the causes of evils and their remedies. In 1863, he sent out letters to the doctors throughout the country asking them to co-operate with him in getting laws passed to regulate the system of hygiene in Italy. He obtained a transfer, in the fall, to the Military Hospital at Pavia, in order to take up his lectures there. Upon his arrival, he found that the course was not regularly instituted and that he would be unable to start. He was invited to give one lecture at the University. The next fall the course was legally instituted and he began a course on mental maladies and anthropology and wrote a book entitled "Genius and Folly". In 1863, he began his study of discriminating between criminal and normal passions. He decided that the laws of psychiatry should be applied to this study. At the end of the scholastic year he was re-

called to his regiment in Genoa. Military duties conflicted with his numerous studies to such an extent that in November, 1865, he resigned from the army. This was the end of the first and happiest period of his life.

He returned to civil life under very trying circumstances. For a period of seven months he was barely able to eke out an existence with his earnings. He received a very small income from the civil hospital at Pavia to which he had been appointed Doctor-in-Chief, but his services at the University and a large part of his practice was free, and he was forced to add to his income by writing articles for magazines.

He published, at this time, his book "Legal Treatment of Mental Alienation" in which he put all his energy. The book was well received in France, Germany and Austria. De Mauri succeeded in having him elected a member of the Imperial academy at Marseilles; Dr. Fraunkel, of Berlin, offered to translate the book into German, and Professor Hirsch, of Vienna, wrote urging him to continue the work. In Italy, however, it was differently received. He was attacked and criticised on all sides. He met at this time Madame Taddei, a benevolent lady of Pavia, who assisted him freely in his work as his secretary, and helped him financially until the crisis had passed. He added the study of the effect of astral bodies on the human mind to his course and wrote an article on this subject. He received 600 lire for this article and 1,200 lire for his book on mental maladies. This put him out of want.

In the Spring of 1866, another war broke out with Austria and he returned to the army. He was very active in this campaign in suppressing an epidemic of cholera, for which he received special honorable mention by the government. At the end of the campaign that fall, he returned to civil life.

He resumed writing for magazines and was the principal contributor to Mantegazza's "L' Igea". He and Mantegazza quarreled about an article and their friendship was broken off.

He took up the study of pellagra, its cause and cure. This disease was very prevalent throughout the country. He spent a long time experimenting with the theories advanced as the cause of the disease and found the cause to be in the use of blighted corn. He then wrote the Government asking them to prohibit the sale of this infected food. He wrote many articles on the subject and made many

experiments to find the inoculating germ which caused the spread of the pellagra. He was made a Chevalier of the order of the "Cross of the Crown of Italy" as a special reward from the Government, in recognition of his work on this disease.

He was married in 1870.

His attention was now devoted entirely to the study of mental alienation and psychiatry. His articles on the subject attracted so much attention that in 1871, the council of Pisaro invited him to take charge of the Asylum there. This gave him the position of leading alienist in Italy. He accepted and took up his duties there in December of that year.

At Pisaro, Lombroso found for the only time in his scientific career, full cooperation and scope to do the work that he desired. He was able to make experiments on the inmates and criminals in the community, and to compile statistics. His writings on the subject were brought to the attention of the Ministry with the result that Mr. Scalia, one of the deputies, proposed that a national bureau for regulation of criminals be opened and that Lombroso be put at the head of it.

In 1872, an attack on his theory of the cause of pellagra was directed against him by Dr. Lussano, Professor of Physiology at the University of Pavia. A great controversy followed. Lombroso, aided by Duprea, a noted chemist, was victorious. Enthused by this victory, he decided to return to Pavia. He felt the need of the stimulating effect of his scholars. His return was untimely. The recent controversy with Lussano had left many hard feelings and he was very coldly received.

At this time he was a candidate for the prize offered by the Royal Academy of Lombardy, for the best scientific work. This prize was awarded by the Riberian Assembly, composed of many of the leading scientists of Italy. They decided that his work on pellagra had not gone far enough, and, although he presented his proofs they decided to reserve decision until their next meeting, two years distant. In the interim, a great dispute was carried on through the country. Many experiments were performed. The Assembly at its second session decided that Lombroso's proofs were not satisfactory but he was supported by Dr. Allardini of Brescia, who had repeated and confirmed all his experiments and decisions, and as a result, he was nominated Special Professor of Medical Practice at the University of

Turin. This infuriated Lombroso, because he was very anxious to have the chair of Mental Maladies then vacant at the University, and as he felt he deserved the chair of Psychiatry he refused to accept the offered post and decided to remain at Pavia.

He called together the First Congress on pellagra and opened a course on that subject at the University of Milan, in 1872. He published in 1873 his legal Diagnosis of Delinquents and opened a free course at the University of Pavia in experimental study of the anthropology of delinquent man. In 1874, he was given the Chair of Medical Practice at the University of Pavia and made many innovations in the teaching of this subject.

His students grew in such large numbers that he wrote to the directors of the asylums at Reggio, Tamburino and Morselli asking them to cooperate with him in publishing a journal of psychiatry and medical practice. They were not very enthusiastic and only one volume was ever published. He was very anxious to have the chair of Mental Maladies. In 1876, he was still appointed as regular professor—instead of special professor, in Medical Practice at the University of Turin. He was very coldly received on his arrival there and could obtain no aid from the directors or state in carrying out his work, and he was forced to do all his experimenting in his private rooms which were very small. In 1877, he was offered the directorship of the asylum at Levi, but he declined it, preferring to teach. His position was at this time bettered as he was appointed Special Doctor to the Province of Turin, and the Council gave him permission to open a criminal hospital for his research, and voted him 600 lire to establish a laboratory. While here he also continued his work on pellagra, writing many articles on this subject. His work was confirmed by Prof. Piffard of New York. He was offered 20,000 lire, by L' Erba of Milan, for the use of his name in manufacturing a specific, based on his experiments, for the cure of pellagra. He refused, but wrote a full explanation of the cure and remedies used and presented it at The World's Exposition, in Paris, and for this contribution he was made an honorary member of the Society of Hygiene, of Paris. He was then forty years of age. He derived considerable happiness because of his unselfish act for humanity which contributed much to the betterment of his country—where pellagra was a veritable scourge.

He published, in 1878, a new edition of "Delinquent Man" with chapters dealing with criminal punishments, etc. This edition had

great success in France and Germany, and North and South America. Lawyers and statesmen took up the study and many reform laws were passed, based on its teachings which greatly improved jurisprudence. In 1879, he wrote a book on the growth of crime in Italy and how to prevent it. This was also adopted as a standard in Europe and America, and students and offers of help in this work came to him from all parts of the world. Enrico Ferri, who afterwards became his firm friend and champion, was one of these students.

Lombroso had now risen from an obscure professor to be the head of a new school of criminology, and famous throughout the world. Although he was at this time very popular, so many controversies arose over his theories that he felt himself to be surrounded by enemies. He lost his father and mother, in 1880, and in 1882, he lost a son. These personal bereavements depressed him greatly.

The first National Congress of Criminal Anthropology, in Italy, was held in 1884, during the National Exposition of Turin. It was attended by all the leading scientists of the country. A new penal code, the result of this congress, was drawn up in 1888. Lombroso objected to the code as it was drafted, claiming that it was not broad enough. He predicted that it would be followed by an increase in the number of criminals, a growth of crime, and would cause confusion in the administration of asylums and prisons. He wrote many arguments in favor of the changes in the new code he proposed, and sought in every way politically to defeat the passage of the original bill which was entirely too narrow in its conceptions. In spite of his efforts, the code was passed in the original draft. This was a great blow to him, and a setback to his doctrines in Italy.

Incorrect translations of his first edition of "Delinquent Man" had been published in France. Lombroso, without rectifying the mistakes by a new translation, attacked the translators and brought about a quarrel with his adherents there. In August 1889, the Congress of Criminal Anthropology was held in Paris. After several days of discussion, it was decided not to accept some of Lombroso's doctrines. He vigorously defended them, and spoke with such asperity that a quarrel ensued, resulting in a break with the French scientists.

A financial crisis, which swept over Italy in 1889, left him in very straightened financial circumstances and he was again forced

to resort in writing articles for newspapers and magazines as a means of livelihood. He wrote many articles for the "Nacion" of Buenos Aires, and "L'Italia" of Montevideo, on many different subjects: art, psychology, literature, etc., in which he displayed his great versatility and wide knowledge.

He revised his works in 1880 dividing them into three groups: medical, literary and criminal, and added a book on decadent politics. He had never given up his ambitions to be the head of a school of psychiatry, and in 1900, the Ministry established this school at the University and gave him the chair. He chose Luigi Roncoroni as his assistant. He now had more time for research work and resumed his work on fermented corn and its relation to pellagra. He also wrote with the aid of Guglielmo Ferrero, a study of delinquent woman. He was appointed inspector of the Asylums of Italy, in 1890. This was a great aid to him in his researches.

Becoming interested in spiritualism he was invited at this time to witness a spiritualistic seance that Eusapia Palladino was holding. Although he had always, before this, fought against spiritualistic beliefs he became quite enthusiastic over her work and became one of her great friends. Meanwhile a great reaction was going on in France in favor of his theories. But, although he wrote new articles on the subject and answered some of the questions that arose, he would not be placated. The third Congress of Criminal Anthropology was held in Brussels, in August 1892. Dr. Semal, director of the asylums of Mons, was appointed president. Dr. Semal had made many experiments relative to Lombroso's theories, had found them to be well founded and he was supported by the work of several other Belgian scientists of note. Manouvrier, the French alienist, who had led the opposition against Lombroso in Paris, felt himself discredited and refused to attend as did Lombroso, although Dr. Semal journeyed to Turin to invite and persuade him to do so and he refused. The Congress was only saved from failure by the great endeavors of Dr. Semal and a few others. The French School was represented by a few of its adherents but the Lombrosian theories were well supported and he was completely vindicated for his reverses in Paris. Many adherents arose in France after this congress, and he resumed writing for the French newspapers and magazines. It was decided to hold the next congress at Geneva.

A commercial crisis, in which many of the banks failed and ex-

change dropped very low, brought great confusion in the country. Many political societies were formed for political betterment, and a group of Lombroso's pupils became the nucleus of the International Socialist Society. They were joined by many idealists and reformers. The Government fought the movement, arresting and imprisoning all the leaders. Lombroso did not agree with all the doctrines and tried to prevent some of his most noted followers from joining the society. The movement was a great menace to his school as many of its exponents became embroiled in political strife.

At this most critical time in the history of the school, Lombroso's assistant who had been with him over eight years, was appointed to a professorship at the University of Sienna. He was very fortunate in filling his place with Mario Carrara, who became a valuable ally in his work. With his support Lombroso managed by writing letters and articles to stem the crisis. The school grew and a course in criminology was instituted in many of the leading universities. Writers of note throughout the world wrote on the subject stimulated by Lombroso's teachings.

Soon after the growth of socialism, a new propaganda, anarchism, was started by a few young Italian emigrants, with Santa Caserio at the head. Lombroso wrote denouncing this doctrine, and devoted a chapter to it in his second edition of "Political Crimes."

The antisemitic feeling in Russia, Austria and Germany caused many Jews to emigrate from those countries to America. Lombroso sympathised with his race and wrote a book on "Antisemitism."

He wrote at Hoepli's request, a small manual on graphology. Through an error in compilation three pages of a book written by a dentist in Rouen, were included in the manual. The dentist wrote to Hoepli threatening a law suit for the theft of his work. Hoepli wrote to Lombroso, who without investigating the matter wrote a very sarcastic reply which resulted in a quarrel. After investigating, he found the pages and consulted a lawyer. The lawyer advised him to keep quiet and the affair would soon be forgotten. But the dispute ended in a lawsuit and Lombroso was compelled to pay the dentist 400 lire.

He exerted his influence to introduce, in Turin, a new system of schools which had been started in Milan, and which later developed into the free public school system.

The 4th Congress of Criminal Anthropology was held at Geneva, in 1896. It was another battlefield between the French School and

the Lombrosian, and the Lombrosian won.

Lombroso and several of the Italian scientists attended. The victory of his theories at this congress initiated their adoption in the penal codes of many countries. He published a new edition of his "Genius", in 1894, and wrote a sequel "Genius and Degeneration" in 1898 and 1899. He found a warm supporter of his theories in Max Nordau, who wrote a book and dedicated it to Lombroso. He was invited to attend the Medical Congress at Moscow in 1897, and he received a great ovation and many honors were shown him on his journey. He made a large collection of skulls, letters, work, and criminal paraphernalia and he and Carrara had converted his quarters into a museum of criminology.

In 1889 he entered the political field. The socialist party had reorganized and he became a member. He was elected a member of the Common Council but withdrew disgusted with the failure of his efforts for reform. In the meantime his theories were gradually spreading all over the world. Many Italian scientists, forced to emigrate on account of political persecution, disseminated his ideas in their new countries. The breach between the French and Italian schools gradually healed. Experiments were made all over the world in matters of anthropology and at the 5th Congress of Criminal Anthropology, he was the hero of the day. At the Pellagrical Congress, in Bologna, it was shown that his work on pellagra had reduced the mortality of that disease. New laws were passed relating to this disease based on his work.

After he retired from the political field he gave all his attention to the study of genius and crime, and attended and assisted at many of the scientific congresses. The Congress of Criminal Anthropology was held in Turin, in 1906. It was decided to make it the occasion of honoring Lombroso. Delegates attended from all parts of the world. Letters were sent to him from all parts and messages were sent him by the King and members of the Royal family. A medal was struck in his honor and the workers of the socialist party presented him with a bust of Caligula. Lombroso was overwhelmed by the demonstration. Finally age and arteriosclerosis enfeebled him. He spent his last year studying spiritualism and writing articles on many diverse subjects. He felt considerable bitterness over the fact that disputes continually arose over his theories on pellagra, but decided that it would be useless to answer them. He passed away peacefully on October 18, 1909.

A STATISTICAL STUDY OF INTELLIGENCE AS A FACTOR IN VOCATIONAL PROGRESS

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The literature of vocational guidance contains but a comparatively small number of studies showing practical relations between degree of general intelligence and vocational ability. The Psychological Division of the Surgeon General's Office, cooperating with the Division of Classification of Personnel tabulate (1) a set of occupational intelligence standards which gives the relative standings in general mental ability, measured by the Army tests, of the median soldiers of various occupations. This is a general rating of trade classes rather than a study of efficiency achievements in relation to varying levels of intelligence within the trades.

Walter Dill Scott (4) presents a series of tests for selecting employees according to their abilities expressed in measurable terms. The paper does not include standards for selection for any given positions.

Ordahl (3) publishes a brief study of the ability of the moron to can tomatoes in competition with normal workers in this industry. He finds that efficiency in working apparently varies directly with the amount of intelligence possessed, ratings being based on intelligence quotient and product per day.

Helen T. Woolley (6) has standardized a set of tests of mental and physical reactions with the expressed purpose of using these tests to study industrial success in various occupations as compared with scores in these tests. Jones (2) makes use of the Woolley Test Series in a study of telegraphic ability and reports that "in spite of the comparatively small number of individuals tested, it seems reasonable to conclude that the use of the tests for predicting probable success in this field is warranted."

The present investigation is a statistical study of the relation of measurable general intelligence to the ability to progress under vocational instruction in various trades and occupations. The subjects are delinquent boys mostly between the ages of 14 and 18 years, who

have been committed to the Whittier State School. The intelligence ratings were made by Dr. J. Harold Williams, psychologist and Director of the Department of Research, using the Stanford Revision of the Binet-Simon tests. The boys are assigned in "trades details" in which they do actual practical trade work receiving technical instruction and practice under constant supervision. The vocational progress ratings are based on monthly reports made by the trade instructors and detail officers to the Superintendent.

The purpose of this study is not as much to find the working relation between measurable general intelligence and trade success independent of other influences as it is to note the part that the intelligence level has a chance to play in the midst of the disciplinary and other administrative conditions involved in the work under observation in order that the mental rating found by the use of the intelligence tests may be more intelligently interpreted as a guide to vocational placement.

Several supplementary features must be borne in mind. In the first place the boys whose trade progress is studied are delinquent boys whose problem is not necessarily nor primarily one of vocational training but rather of education along lines of conduct, discipline, and social morality. The purely educational features in both school and trade work are frequently means of reaching an end quite different from that sought by the same kind of instruction in public or trade schools. The instructors of necessity have in mind many attendant circumstances which color their reports on vocational ability and advancement.

Material. Monthly reports of trade instructors and detail officers on the individual boys in their details are used as data on trade success. The reports available for analysis were for the period June 1917 to March 1919 inclusive; there were frequent omissions of a complete report for a month from a detail, also the absence of reports on an individual boy for a month or more. The data on intelligence level is from the file of intelligence quotients as recorded by the Department of Research.

Method. Each report of an officer on the record of a boy for the month in question was analyzed from the point of view of successful progress in the work of the detail under investigation. As far as possible rating was made of progress in learning as indicated by increased proficiency and skill. In some cases the wording of the re-

ports was such or the nature of the work of the details is such that the rating is of the attitude, willingness and quality of work done rather than the technical progress. Special note will be made where this element is particularly to be considered. The statistical ratings are made on a five point scale in which the gradations may be defined roughly as follows:

1. Very poor progress, or no progress.
2. Poor progress, or slow progress.
3. Fair progress.
4. Good progress, doing well, etc.
5. Very good, excellent, or unusual progress.

The ratings were all made by one person, the writer, so that the standard was fairly constant. Tabulation was made of ratings for each month spent by a boy in a detail where the statements in the reports were sufficiently complete and explicit to warrant a rating. The final progress index (P. I.) for each boy is the arithmetical average of the various monthly ratings recorded for his work in the detail under consideration. Each detail is tabulated and statistically treated separately. The statistical treatment consists of a distribution of Progress Indices by intelligence levels, the indices being grouped by half units and the intelligence levels by groups of .05 units of I. Q. Where there were sufficient cases to warrant such work a Pearson Coefficient of correlation was figured, otherwise the Spearman Foot-rule method of correlation by ranks was used.

After each detail had been considered separately a grouping was made according to the nature of the work of the details; the groups considered may be termed the technical trades, the culinary trades, the agricultural trades and the personal service details. These were treated statistically in the same manner as the individual details.

Finally a distribution and correlation was made which included the data for all details in one table.

Data. As stated above under **Method**, for each of the trade groups considered a correlation was made between Progress reported and the Intelligence Quotient of the various boys in the groups. Table I lists the "trades details" in the order of the value of the correlation coefficient. The number of cases found in each group is given in the column headed *f*. Also the median I. Q. and median Progress Index are listed for each trade. In addition to the data for the twenty different details the same material is listed for four groups

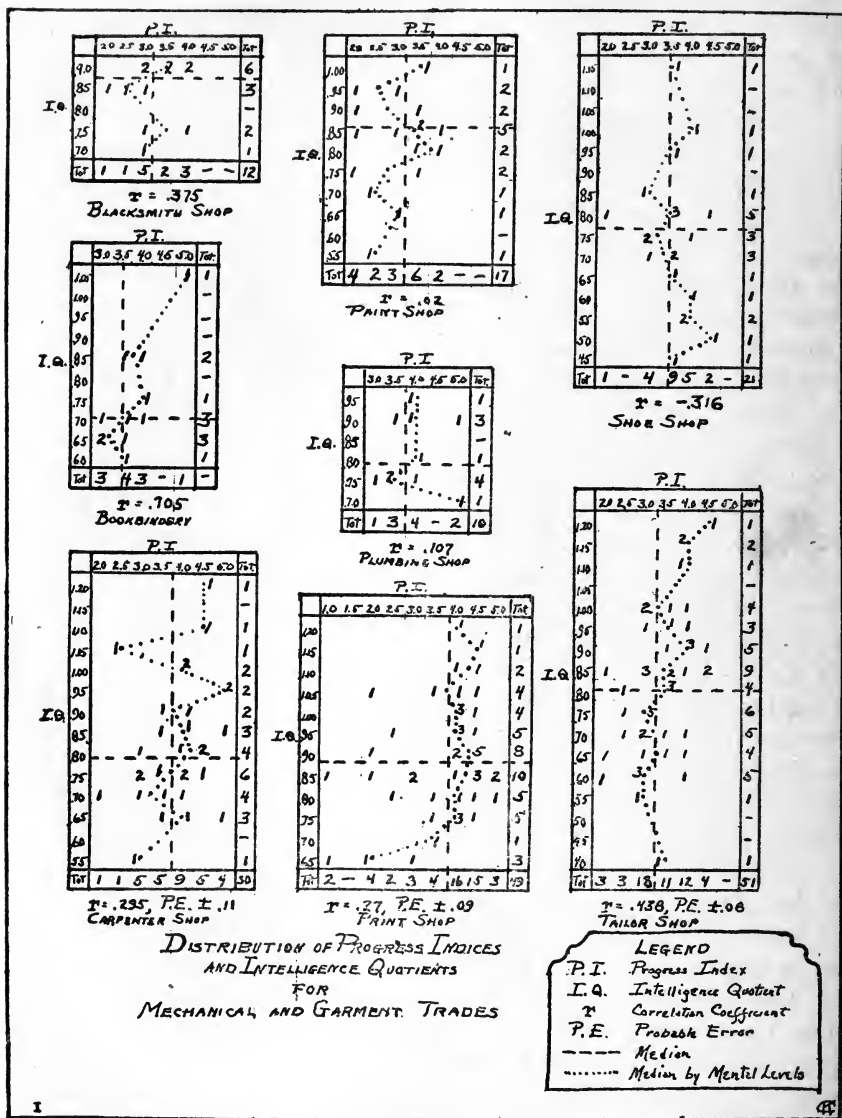


Fig. 1. Distribution of Progress Indices and Intelligence Quotients for Mechanical and Garment Trades.

of details and the total group. The correlation coefficients recorded are of two kinds, the Pearson coefficient where the number of cases was 30 or over, the Spearman Footrule coefficient transmuted by table to correspond with the Pearson coefficients when there were less than 30 cases.

TABLE I.
COEFFICIENTS OF CORRELATION BETWEEN TRADE
PROGRESS AND INTELLIGENCE LEVEL.

Detail	r	f	Med. I.Q.	Med. P.I.
Bookbindery .....	.70	11	.71	3.7
Poultry and rabbits.....	.475	16	.83	4.0
Tailor shop .....	.44	51	.83	3.5
Blacksmith shop .....	.375	12	.87	3.45
Carpenter shop .....	.295	30	.805	4.0
Print shop .....	.27	49	.90	4.1
Teamsters .....	.22	23	.85	3.5
Housekeepers .....	.18	23	.81	4.0
Plumbers .....	.11	10	.80	4.0
Farm-general .....	.09	37	.82	4.0
Officers' dining room.....	.08	37	.78	3.8
Flower garden .....	.05	32	.82	4.0
Bakery .....	.04	24	.83	3.7
Laundry .....	.03	18	.71	4.0
Paint shop .....	.02	17	.88	3.4
Boys' dining room.....	-.02	51	.78	3.7
Kitchen	-.14	28	.77	4.0
Dairy	-.14	27	.72	4.0
Vegetable garden	-.21	13	.75	3.8
Shoe shop	-.32	21	.79	3.7
Mechanical and garment trades.....	.30	188	.83	3.9
Service details .....	.02	128	.79	4.0
Culinary	-.02	52	.81	4.0
Agricultural details	-.04	148	.82	3.9
Total group .....	.113	516	.82	3.9

The total group, consisting of 516 ratings, gives a coefficient of correlation of .113, P. E. + .029, (Pearson) between progress in learning and intelligence level. This indicates a slight positive relation between the two factors under consideration in the composite group. The figure for the total, however, does not have the practical significance of the coefficients for the smaller less composite groups. The median I. Q. for the total group, .82, and the median Progress Index, 3.9, should be kept in mind in considering the data for the various sub-groups.

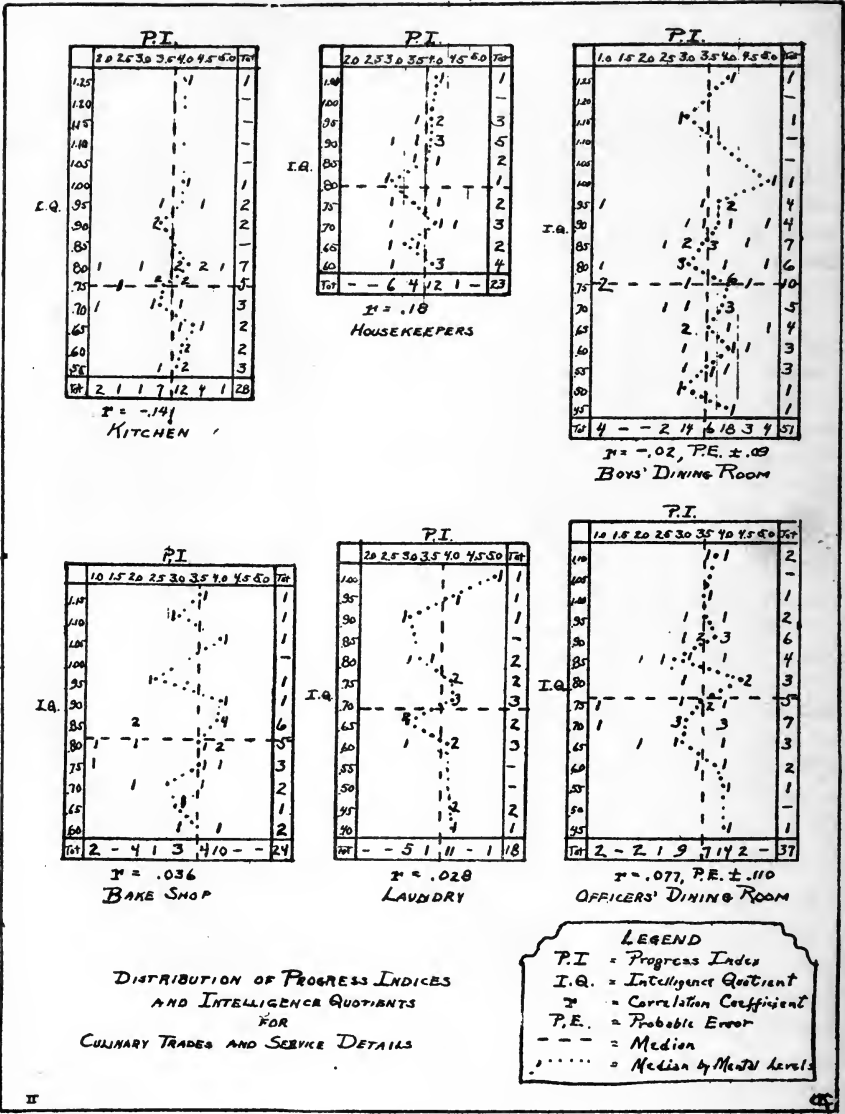


Fig. 2. Distribution of Progress Indices and Intelligence Quotients for Culinary Trades and Service Details.

MECHANICAL AND GARMENT TRADES.

The eight trade details listed under this heading are the skilled vocations of the School apart from the culinary and agricultural departments. These shops are maintained with a two-fold purpose, to provide vocational education and to assist by means of the shop products in maintaining the School and its equipment. On account of this double purpose the method of instruction is largely of the apprentice type and progress rated under such conditions is both progress in learning and amount of work accomplished. In certain details, not in this group, note will be made where the rating is almost exclusively of amount of work done rather than of degree of proficiency attained.

Table III is the distribution of all ratings made for the group of trades which includes the Blacksmith shop, the Bookbindery, the Carpenter shop, the Paint shop, the Plumbing shop, the Print shop, the Shoe shop, and the Tailor shop. The coefficient of correlation is both positive and definite, .304, and indicates that, other things being equal, successful progress in the trade work is directly proportionate to the intelligence quotient, subject to individual variations. Degree of mental ability appears as a much more important factor for success for this group than for the work of the School taken as a whole.

The method of Critical Scores, as advocated by Thurstone (6) may be applied to the data considered. A critical rating for such a set of material would be that level or I. Q. below which average progress in trade work cannot be expected. For this trades group a Critical Rating of .75 divides the cases in such a way that of boys having I. Q.'s below this level less than 25% can be expected to make average or better progress. On the other hand, of cases having an I. Q. of .95 and above 72% are found to make average or better progress. Between these two critical scores the chances due to mental ability appear to be about equal for progress below or above the average.

It is further to be noted that this group includes the Shoe shop, data for which gives a negative correlation. That is, some of the apparently exceptional cases of the composite group which are making successful progress in spite of I. Q.'s below the critical level are achieving this success in an atypical group to which special consideration must be given under conditions of vocational assignment.

In the separate discussion of the trade groups the fact must be borne in mind that the data is on a limited number of cases due to

the conditions of record keeping. For this reason the statistical accuracy of correlation coefficients is low but the cases recorded are an absolutely random sample unselected except as being those in the details between arbitrarily chosen dates. From observation the writer believes that the cases covered in this respect are representative of the current condition in the instructional groups.

TABLE II.

DISTRIBUTION OF PROGRESS INDICES BY INTELLIGENCE LEVELS FOR ALL TRADE GROUPS.

	P. I.'s									
	1.0	1.5	2.0	2.5	3.0	3.5M	4.0	4.5	5.0	Total
1.25	....	....	....	....	....	....	2	....	....	2
1.20	....	....	....	....	....	....	1	1	....	2
1.15	....	....	....	....	1	2	2	2	....	7
1.10	1	....	....	....	1	1	3	3	....	9
1.05	....	....	1	1	1	3	6	1	1	14
1.00	....	1	....	....	3	5	10	1	2	22
.95	....	....	....	3	5	7	18	2	2	37
.90	....	....	2	....	9	13	24	7	4	59
.85	1	....	6	2	14	13	15	6	3	60
.80 M—	3	....	8	2	12	10	18	8	5	66—M
I.Q. .75	4	....	3	3	20	12	29	4	1	76
.70	1	....	5	3	13	13	21	1	1	58
.65	1	....	4	1	20	9	14	1	2	52
.60	....	....	1	....	6	3	16	2	....	28
.55	....	....	....	1	4	2	7	....	....	14
.50	....	....	....	....	1	....	2	1	....	4
.45	....	....	....	....	....	1	3	....	....	4
.40	....	....	....	....	....	1	1	....	....	2
Total.....	11	1	30	16	110	95*	192	40	21	516

M

Coeff. of Correlation .113, P. E. .029.

M indicates median levels.

Blacksmith shop. The distribution of I. Q.'s and Progress Indices for the 12 boys recorded as receiving Blacksmith instruction shows some unusual features. The number of boys is small. The median intelligence level is nearly ten points above that of the trades group while the median Progress Index is five points below that of the larger group. On account of the small number of cases a critical level cannot safely be fixed; the few facts available indicate a comparatively high level necessary to eliminate probabilities for failure. The conditions of instruction and supervision are such as to rule out

certain disturbing factors found in larger groups, so that intelligence may play a disproportionately large part in trade success when comparison is made with shops where more boys are working without additional facilities for supervision. The correlation between mental ability and trade progress is positive and definite as indicated by the coefficient .375 (Spearman).

TABLE III.
DISTRIBUTION OF PROGRESS INDICES BY INTELLIGENCE LEVELS FOR

	1. MECHANICAL TRADES;					2. GARMENT TRADES.					
	1.0	1.5	2.0	2.5	3.0	3.5M	4.0	4.5	5.0	Total	
1.20	---	---	---	---	---	---	1	1	---	2	
1.15	---	---	---	---	---	1	2	2	---	5	
1.10	---	---	---	---	---	---	1	3	---	4	
1.05	---	---	---	1	1	1	3	1	1	8	
1.00	---	---	---	---	2	2	5	1	---	10	
.95	---	---	---	1	---	2	5	1	1	10	
.90	---	---	1	---	1	5	8	7	1	23	
.85	1	---	2	---	7	3	4	5	3	25	
.80 M	---	---	2	2	2	8	3	4	3	24 M	
.75	---	---	1	1	10	5	9	2	---	28	
.70	---	---	1	2	6	6	3	---	1	19	
.65	1	---	1	---	5	5	2	---	1	15	
.60	---	---	1	---	3	1	2	---	---	7	
.55	---	---	---	1	2	---	2	---	---	5	
.50	---	---	---	---	---	---	---	1	---	1	
.45	---	---	---	---	---	1	---	---	---	1	
.40	---	---	---	---	---	1	---	---	---	1	
Total	2	---	9	8	39	41M	50	28	11	188	

Coefficient of Correlation .304, P. E. .044.

M indicates median levels.

Book-binding. The coefficient of .705 found in the distribution of ratings in the Bindery indicates that a higher level of intelligence is a strong factor favoring increased success or progress in this trade. The statistical figures are, however, weak since there are but eleven cases recorded. One interesting feature of the distribution is worthy of special note; although there is apparently a close relation between degree of intelligence and degree of success yet the minimum requirement of intelligence for average success, the critical level, appears to be distinctly lower than the level for the composite trades group. It seems, then, that other things being equal, a boy of mental ability slightly below the School average has more chance of doing

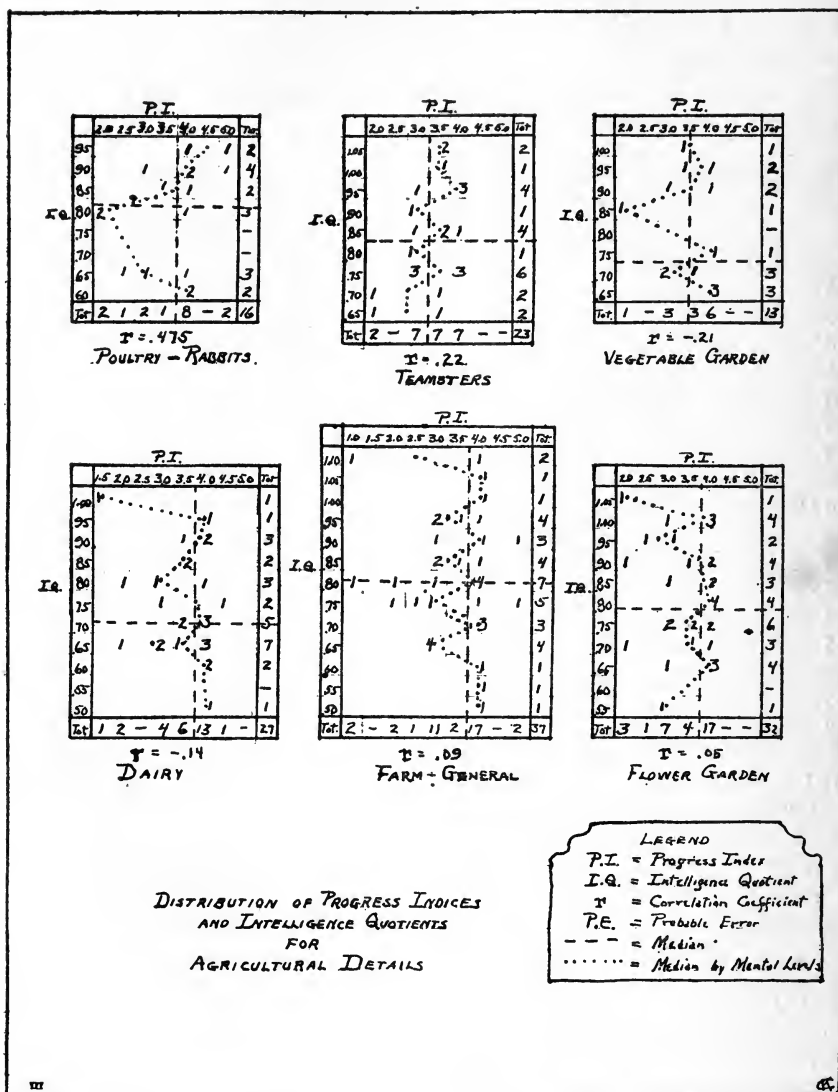


Fig. 3. Distribution of Progress Indices and Intelligence Quotients for Agricultural Details.

average work in this detail than in the Blacksmith shop as above noted; but on the other hand a boy with a higher level of intelligence has a greater chance for comparatively higher degree of success here than in the other details.

Carpenter shop. In the distribution of ratings of 30 boys in the Carpenter shop a correlation coefficient of .295 is found which indicates a positive relation between level of mental rating and trade progress. Both the median level and the critical level of intelligence are the same as for the trades group as a whole. In other words the indications are that time spent in trying to teach Cabinet-making to feeble-minded boys is wasted while boys of the borderline and dull-normal groups will in 50 per cent or more cases profit vocationally by the instruction.

Paint shop. Success in the Paint shop does not seem to have a close dependence on mental acuity if the evidence of 17 cases is accepted as typical. The correlation is low, practically zero. On the other hand the distribution shows a rather clearly defined critical level. Of the boys having I. Q.'s below .80 but one attained average success and of those below .75 not one progressed sufficiently to be rated as average among the boys of the shop. To have a fair chance to advance satisfactorily in this work an I. Q. of .80 or higher is necessary, according to indications. Above that level the data show no tendency for increased success with higher mental ability, the range of levels represented, however, does not go above 1.00.

Plumbing shop. With but ten records distributed the tendencies in this department can hardly be considered as clearly indicated. Statistically there is a slight positive correlation, .107, but the frequency is too small to permit this to serve as an index.

Print shop. The figures in the case of the Print shop show two definite features, a positive correlation, .27, between intelligence and trade progress, and a clear critical level. On account of the varied nature of the activities involved and the apparent requirement for literacy, boys of higher grades of intelligence have been assigned to this department. One result is that the median level of intelligence, .90, is 3 points above that of the trades group. Another indication of the importance of intelligence as a factor in success in learning the printing trade is the small difference between the two critical levels for success in the trade. The minimum requirement for equal chance

of average success is .75. But of all cases above the .90 level 84 per cent attained success rated as average or better.

Shoe shop. The figures on progress in relation to intelligence for the Shoe shop show that it is atypical among the Trades. Although the medians for I. Q. levels and P. I.'s are the same as for the total group the tendencies toward success are reversed. The correlation is definitely negative, coefficient—.316, and of the six cases having I. Q.'s of .70 or below all achieved average or better progress; whereas of the 15 cases having higher I. Q.'s but 33 per cent progressed sufficiently rapidly to be rated as high as average.

TABLE IV.
DISTRIBUTION OF PROGRESS INDICES BY INTELLIGENCE
LEVELS FOR
CULINARY TRADES.

	1.0	1.5	2.0	2.5	3.0	3.5M	4.0	4.5	5.0	Total
1.25	---	---	---	---	---	---	1	---	---	1
1.20	---	---	---	---	---	---	---	---	---	---
1.15	---	---	---	---	---	1	---	---	---	1
1.10	---	---	---	---	1	---	---	---	---	1
1.05	---	---	---	---	---	---	1	---	---	1
1.00	---	---	---	---	---	---	1	---	---	1
.95	---	---	---	1	---	1	---	1	---	3
.90	---	---	---	---	---	2	1	---	---	3
.85	---	---	2	---	---	---	4	---	---	6
.80 M	1	---	2	---	1	1	4	2	1	12 M
.75	1	---	---	1	---	3	3	---	---	8
.70	---	---	2	---	---	2	1	---	---	5
.65	---	---	---	---	1	---	1	1	---	3
.60	---	---	---	---	---	1	2	1	---	4
.55	---	---	---	---	---	1	2	---	---	3
Total	2	---	6	2	3	12M	21	5	1	52

Coefficient of Correlation, —.022, P. E. .093.

M indicates median levels.

Tailor shop. The Tailor shop distribution is again typical of the trades group as regards its general tendency. There is a definite positive correlation represented by the coefficient .438. The relation between intelligence and progress is especially apparent in the higher levels. Above the critical level of .85, 72 per cent of the boys are rated as making average or better progress and the boys of higher levels of mental ability are credited with relatively higher Progress Indices. Below the level of .85, on the other hand, the factor of degree of intelligence appears to have less influence toward success.

The distribution of all cases below this level is about evenly divided between cases above and cases below average in rate of progress. A qualitative consideration of the conditions indicates that the ratings for the work of the boys below this level was as much of quantity of work done as it was of amount of technical progress, hence by showing willingness to work on the simpler tasks the boys of lower intelligence in some cases produced sufficiently to be credited with average success. No minimum critical level is indicated.

THE CULINARY TRADES.

The nature of the work and instruction in the Kitchen and Bakery was considered as sufficiently different from the work of the foregoing groups to be considered as a distinct class. The combined distribution of the two details shows a correlation coefficient between intelligence and trade progress of $-.022$, which, with a Probable Error of $.093$, means practically no correlation. Consideration of the graph brings out the fact that of boys with I. Q.'s above the level 1.00 and below $.70$ none made distinctly poor records while those in the intermediate range of intelligence show a wide scatter as to amount of success. The proportions above and below the average are fairly constant and equal throughout the range of intelligence with a slight increase of inferior progress among the boys in the central group.

Bakery. The figures for the Bakery taken alone indicate a very slight and practically negligible correlation, coefficient, $.036$. Qualitative consideration shows a condition similar to that noted for the culinary trades group as a whole. The boys of the two extremes of intelligence approach more closely and consistently the average record than do those boys whose I. Q.'s are between $.70$ and 1.00 . One theory to explain this condition might be that the boys of higher intelligence possess superior ability to profit by the trades instruction while those of the lower levels are more amenable to supervision and so more pliant to follow the directions and instruction under the conditions of almost constant observation.

Kitchen. The records of the boys in the Kitchen show a tendency similar to that found in the Bakery records but with a slight negative correlation,— $.14$, especially noticeable in the lower part of the range. With one exception all boys of I. Q.'s below $.70$ achieved average or better success; the one exception was rated but $.2$ of a point below the median. At the other extreme all cases with I. Q.'s of $.90$ or above closely approximated the average in their success ratings. **Worthy**

of note is the fact that the median I. Q. is slightly below that for the total School and that the detail is 78 per cent negro.

AGRICULTURAL DETAILS.

This set of details is composed of six groups whose composition and individual make-up is of a varied nature. The correlation coefficients range from positive .475 to negative .21; the coefficient for the combined group is $-.042$ with a Probable Error of .05. Success and failure are scattered throughout the range of intelligence from an I. Q. of .65 up. Below that point eight out of nine cases received at least average ratings. The median I. Q. and P. I. are the same as for the School total.

Dairy. The relation between intelligence rating and success in this detail is a negative quantity represented by the coefficient $-.14$. Both the median level and the critical level of I. Q. ratings are low, the median falling at .72 and the critical level being .65, below which all cases show at least average ratings—this being a reversal of the conditions for the mechanical trades group. In the high grade moron and borderline levels of intelligence the chance for success or failure is about equally divided; between the I. Q.'s .85 and 1.00 all boys approximated average success ratings. There is insufficient data to warrant conclusions regarding the extremes of the range.

Farm-general. This group of boys were in the detail, as a rule, less than a month. The work is largely routine supervised farm labor. The result is that the ratings are of willingness to work and energy exerted rather than technical success of any kind. The coefficient, .09 P. E. .109, indicates that intelligence level is not the main factor for making an average "progress" rating possible. The fact that a large proportion of low grade boys, 60 per cent of those rated below .80, can do this work successfully while but 50 per cent of those above this level work satisfactorily, suggests that this kind of work might well be used to occupy the time of and render productive the labor of boys of feeble-minded grades of intelligence. With proper supervision for this work, boys of the higher levels of ability who can profit by more technical and more personally valuable training can be released from such work as this where their productive value appears below that of the lower grade boys.

Flower Garden. The flower garden detail is another group where the production has been rated rather than the vocational progress. For the majority of boys in the department the work is routine and su-

pervised although in a few cases work is done which demands more intelligence. For the work of the department during the months studied the coefficient, .05, indicates that the boys of higher levels of intelligence do not to more than a very slight extent earn the more creditable ratings.

TABLE V.
DISTRIBUTION OF PROGRESS INDICES BY INTELLIGENCE
LEVELS FOR
AGRICULTURAL DETAILS.

	1.0	1.5	2.0	2.5	3.0	3.5M	4.0	4.5	5.0	Total
1.10	1	---	---	---	---	---	1	---	---	2
1.05	---	---	1	---	---	2	1	---	---	4
1.00	---	1	---	---	1	2	4	---	---	8
.95	---	---	---	1	4	2	7	---	1	15
.90	---	---	1	---	4	2	8	---	2	17
.85	---	---	1	---	4	6	5	---	---	16
.80 M	1	---	4	---	3	---	10	---	---	18 M
.75	---	---	1	1	7	2	7	1	1	20
.70	---	---	2	---	2	5	7	---	---	16
.65	---	---	2	1	8	2	10	---	---	23
.60	---	---	---	---	---	---	5	---	---	5
.55	---	---	---	---	1	---	1	---	---	2
.50	---	---	---	---	---	---	2	---	---	2
Total	2	1	12	3	34	23M	68	1	4	148

Coefficient of Correlation, $-.042$, P. E. $.055$.

M indicates median levels.

Poultry and rabbits. Statistical consideration of the few boys assigned to the Poultry and rabbit raising department indicates a comparatively strong positive relation between degree of intelligence and rate of progress in learning. Upon examining the distribution it seems safer to say that high intelligence points to success than the reverse, for an insufficient number of cases are found in the range immediately below the median on which to base any sound conclusions.

Teamsters. Previous to this study the assumption has been that the prime requisites for eligibility to enter the Teamsters detail were height and strength somewhat regardless of mental caliber. Analysis of the distribution of ratings, however, indicates that although nearly fifty per cent of the boys of below average intelligence are rated as average in progress yet a distinctly larger proportion of those of higher ratings attain success. The coefficient of correlation is $.22$. No critical level is indicated in spite of the fact that the two distinct failures are both boys who are definitely feeble-minded.

Vegetable garden. Although too few cases are recorded in this detail to warrant any very sweeping conclusions yet the 13 reports tabulated give some interesting indications. Of the seven boys who were rated as being acceptable workers five have I. Q.'s of .75 or below, of the six whose success records were below average, four have I. Q.'s above .85; e. g., .89, .90, .96 and 1.02. The natural conclusion which can be formulated, with a little hesitation on account of the small amount of evidence, is that the detail can be manned by boys of low intelligence, at least so far as the demands on innate ability are concerned. A glance at the kind of work performed confirms the conclusion; the boys are engaged in manual labor under supervision. The problem of obtaining efficient work from the boys appears, then, to be one of providing proper observation and guidance for the work rather than high grade workers. To the vocational placement agent this detail presents another opening to receive boys of the lower levels of intelligence.

SERVICE DETAILS.

The groups, Boys' dining room, Officers' dining room, Housekeepers and Laundry, considered under this division are those in which boys are doing work for the School, contributing to the upkeep without deriving specific vocational benefit. As has been said informally of the boys in those details, "they are learning to work rather than learning a trade." The ratings of success, then, are in most cases work records or ratings of the boys' response to the demand for activity under supervised conditions. In the combined distribution, as in less degree in the individual groups, degree of intelligence shows little strength as a factor in satisfactory service. The correlation coefficient is practically zero, .023, P. E. .059. No critical levels are apparent and the distributions both of intelligence and progress ratings about the medians are normal, one not appearing to be influenced by the other. As a general rule intelligence level need not be considered, within the limits observed here, in the assignment of boys to the groups included. The characteristics of the four subgroups are practically identical with those of the composite group.

INTELLIGENCE QUOTIENT AS AN AID TO VOCATIONAL GUIDANCE.

On the basis of the statistical tabulations and correlations it is evident that there is a distinct relation, which varies in nature and

degree with different occupations, between ability to progress in learning under conditions of supervised vocational instruction and the degree of native general intelligence possessed by the individual boy receiving the instruction. The value of the intelligence quotient, which indicates relative mental ability, as a vocational guide varies with the nature and degree of the relation found to exist in the in-

TABLE VI.

DISTRIBUTION OF PROGRESS INDICES BY INTELLIGENCE LEVELS FOR SERVICE DETAILS.

	1.0	1.5	2.0	2.5	3.0	3.5M	4.0	4.5	5.0	Total
1.25	---	---	---	---	---	---	1	---	---	1
1.20	---	---	---	---	---	---	---	---	---	---
1.15	---	---	---	---	1	---	---	---	---	1
1.10	---	---	---	---	---	1	1	---	---	2
1.05	---	---	---	---	---	---	1	---	---	1
1.00	---	---	---	---	---	1	---	---	---	1
.95	1	---	---	---	1	2	6	---	---	10
.90	---	---	---	---	4	4	7	---	1	16
.85	---	---	1	2	3	4	2	1	---	13
.80 M	1	---	---	---	6	1	1	2	1	12 M
.75	3	---	---	---	3	2	10	1	---	19
.70	1	---	---	1	5	---	10	1	---	18
.65	---	---	1	---	6	2	1	---	1	11
.60	---	---	---	---	3	1	7	1	---	12
.55	---	---	---	---	1	1	2	---	---	4
.50	---	---	---	---	1	---	---	---	---	1
.45	---	---	---	---	---	---	3	---	---	3
.40	---	---	---	---	---	---	1	---	---	1
Total	6	---	2	3	34	19M	53	6	5	128

Coefficient of Correlation .023, P. E. .059.

M indicates median levels.

dividual shops. Where the correlation between intelligence level and success is high and where, in addition to this, distinct critical levels are found, the I. Q. is a valuable positive indication of ability in a trade. This condition, however, is found in practically no cases so far studied. Distinct correlations are found, also in other cases critical levels are clearly defined, but nowhere a combination of the two so clear and distinct that intelligence level alone can be said to be a "trade test" in the sense of indicating those who will succeed to the exclusion of all others.

This, however, does not eliminate the intelligence quotient as an

assistance in assignment to trades instruction or in vocational advice. The brief study here undertaken contains statistical evidence that critical levels for certain trades are present below which level of intelligence success cannot be expected. The evidence indicates that degree of mental ability can be a definite measurable negative guide in vocational guidance, that boys of certain levels of intelligence may be safely "guided" away from trade instruction. The evident need is for trade tests to seek the positive factors which assure success specifically rather than these negative factors which limit success. Until such tests are perfected the process of intelligent elimination of unfit material by means of the use of I. Q.'s determined by such tests as the Stanford Revision of the Binet Scale stands as a scientific aid to placement. Enough exceptions and variations in the material are present to warrant a quotation from Jones (2) who says "It can be seen that users of psychological tests can never afford to be mechanical." Various factors and individual differences in traits other than general intelligence must be considered in both positive and negative vocational guidance.

SUMMARY AND CONCLUSIONS.

Statistical analysis of 516 Progress Indices of boys in the Whittier State School receiving trade instruction shows that innate intelligence as measured by the Stanford Revision of the Binet-Simon Intelligence tests and expressed by the Intelligence Quotient is a definite positive factor in determining the possibility of successful progress under the conditions surrounding this instruction. The amount and nature of the influence of intelligence varies with the different trades and groups of trades.

A table is given which shows for each trade the relation, expressed as a correlation coefficient, which is found to exist between intelligence level and trade progress.

The trade groups are classified according to the kind of work done; classification is under four headings, (1) Mechanical and Garment Trades, which includes Blacksmith shop, Book-binding, Carpenter shop, Paint shop, Plumbing shop, Print shop, Shoe shop and Tailor shop; (2) culinary trades, including Bake-shop and Kitchen; (3) Agricultural details, comprising Dairy, General farm work, Flower garden, Poultry and rabbits, Teamsters and Vegetable Garden; and (4) Service or non-vocational details, which includes the Boys' dining room, Officers' dining room, Housekeepers, and Laundry.

In some of the trades critical levels of intelligence are found below one of which average success cannot be expected and above one of which success can be expected in a high percent of cases. In a few trades the conditions are reversed so that success is expected of those whose I. Q.'s fall below the critical level.

Intelligence level exerts its most positive influence in the groups of trades noted as Mechanical and Garment Trades, for which as a whole the correlation coefficient is .304. Of boys having I. Q.'s below .75 who are assigned to learn these trades less than 25 per cent can be expected to make average progress; of those whose I. Q.'s are above .95 expectation is that approximately 75 per cent will be successful.

In the culinary trades, of boys with I. Q.'s above the level of 1.00 and below .70, none made distinctly poor records while those included in the intermediate range show considerable variability in degree of success.

The Agricultural group includes various trades whose natures are widely different, the composite presenting a neutral distribution. The conclusions are recorded for the individual details.

In the Service details ratings were made by the officers of work accomplished rather than of technical progress. No critical levels nor correlations could be found. For these groups other factors than intelligence must be considered in the assignment of workers.

Of the individual trade groups having a positive correlation between intelligence level and success critical levels were found as follows:

In the Carpenter shop average success cannot be expected of boys having I. Q.'s below .75; in the Paint shop the minimum for success is .80. In both distributions there was no evidence of an upper Critical level above which success can be anticipated in a large majority of cases.

In the Print shop failure is expected when the I. Q. is under .75, success from boys with levels above .90.

The figures for the Tailor shop show no lower critical level but approximately 75 per cent of boys whose I. Q.'s are above .85 "make good."

There is insufficient data for the Blacksmith shop and Book-binding to determine definite critical levels; the indications are that the former requires a comparatively high I. Q. while the Bindery requires but a low minimum for average progress. In each case a

higher degree of intelligence increases the expectation for success.

The Plumbing shop shows a slight positive correlation with insufficient data for determining success levels.

In the Poultry and rabbit department data is again inconclusive and only suffices to indicate that the higher levels of intelligence are most influential for success.

Success in the Teamsters' group is more prevalent among boys of higher intelligence than in the lower levels. However, good ratings are distributed so extensively throughout the range that no critical levels are noted.

The Shoe shop shows a negative relation such that boys with I. Q.'s below .70 appear to be best fitted for successful instruction. Likewise in the Dairy the boys having ratings below I. Q. .65 achieve the better progress records. The conditions in the Vegetable garden are such that boys whose I. Q.'s are below .75 can do the work satisfactorily while those having intelligence rated above .85 fail to give satisfaction in the majority of cases.

In the routine work of the "General farm" the boys of the lower levels are as productive as those of higher grades of intelligence; likewise in the Flower garden.

Two groups, the Bakery and the Kitchen, show characteristics not found elsewhere. Successful ratings are given in the majority of cases to boys whose I. Q.'s are below .70 in each detail, or above 1.00 in the Bakery and above .90 in the Kitchen. The failures are mainly confined to the intermediate range.

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COMMUNICATION AND DISCUSSION

RECENT ADVANCES IN STATE CARE OF THE FEEBLE-MINDED

Southern states are rapidly coming to a realization of the costliness of the neglect of the feeble-minded. This class of persons, as distinguished from the insane, were recognized in Texas in 1915, when \$100,000 was appropriated for the establishment of a State Colony for the Feeble-minded. In 1917 Arkansas established a State Colony.

In 1918 the commonwealth of Kentucky, which was already spending \$212,000 per year for the maintenance of feeble-minded persons, appropriated \$50,000 to expand the State School into a Farm Colony. Last year South Carolina also made an appropriation for the establishment of a State Colony, and made provision for the custody of persons born with too little wits to manage for themselves.

By a law passed in April 1919, the state of Tennessee established the Tennessee Home and Training School for Feeble-minded Persons. It set apart for the use of this institution the \$300,000 plant of the Tennessee Industrial School, making provision for the moving of the Industrial School to the Boys' Reformatory, and moving the Reformatory to the Herbert Domain in the Cumberland Mountains, about one hundred miles north of Chattanooga. \$10,000 was appropriated for the adaptation of the Industrial School to the purposes of caring for mental defectives. There was also appropriated \$180 per capita per annum for the maintenance of all feeble-minded persons committed by the courts to the Training School.

In May 1919 the Florida Legislature appropriated \$200,000, available during the next two years, for the purposes of establishing and maintaining The Florida Farm Colony for Epileptic and Feeble-minded.

Commissions in the state of Georgia and Mississippi have the matter of state care of the feeble-minded under study, and a bill is before the present legislature of Georgia looking to the establishment of a colony in that state.

The economy in money and in citizenship of such an establishment in the state of Alabama has been abundantly demonstrated to the people of the state. From the statements made above it is readily seen that Alabama will be left very much alone in the matter of the neglect of the feeble-minded if the present legislature does not act favorably upon the Alabama Mental Deficiency Bill and make appropriation for the establishment of the Alabama Home for Mental Inferiors.

BRADY'S RESPONSIBILITY.

Pinck Hardin, a farmer and storekeeper in the eastern part of Lauderdale County, was brutally murdered in his store April 24, 1917. In the circuit court of Lauderdale County, August term 1917, the jury in the case found John T. Brady, husband of Hardin's youngest daughter, guilty of this crime and sentenced him to hang. The case was appealed to the supreme court and there was a long delay because the shorthand notes of the proceedings were in the possession of the court stenographer who had been drafted and was then with the American Expeditionary Forces in France. Finally this record was made available in February 1919, and the Supreme Court of Mississippi affirmed the sentence and fixed the date of April 18, 1919 for Brady to hang.

Meanwhile, the mental condition of Brady had attracted wide attention. At the request of many citizens of Meridian Dr. J. M. Buchanan made a mental examination of Brady and is quoted as having stated that Brady has the mind of a seven year-old boy. Dr. Thomas H. Haines, Scientific Adviser to the Mississippi Mental Hygiene Commission, in his survey of county jails, came upon Brady in November 1918. He stated that Brady had a mental development not to exceed that of a child of eight years.

Upon the urgent petitions of large numbers of citizens of Lauderdale and Jasper Counties that Brady's sentence be commuted, Governor Bible granted, in April, a three months' reprieve, and referred the matter to the Board of Pardons. This Board commuted his sentence to confinement for life in the Mississippi State Penitentiary, July 11, 1919. Many estimable and highly intelligent citizens of Lauderdale County feel very strongly that Brady is responsible for the crime committed,—that he knew what he was doing when it was committed, that he knew it was wrong, and that he should therefore suffer the death penalty.

In view of this situation, Dr. Haines spent two hours with Brady since he has been in the Penitentiary. He gave him a thorough-going Stanford Binet-Simon measurement. Brady had been in the Penitentiary more than a week. He was thoroughly at home, and if there had previously existed any reason for his feigning foolishness, or trying to act as a crazy man, the reasons for such possible malinger have disappeared by the circumstances of his confinement and the commutation of his sentence.

By the most liberal estimate possible, as a result of this examination, Brady's mentality is that of a child of 5 years and 9 months of age. His years of experi-

ence have, of course, given him possession of facts in human nature which a young child would not have. He does know things, and is able to do some things, which a six year-old would not know and could not do. On the other hand, his mind is so limited in its capacity that he is unable to do some things which a six year-old would be able to do. The statement of mental age is the most accurate statement of Brady's mental calibre which the science of applied psychology can give us today. He has less capacity to adapt himself to his environment than has the average six year-old child.

To think and speak of the responsibility of this fellow in the terms some persons do when they would hold him to the consequences of the homicidal act is to ignore his child mind. To blink these facts is to cloud one's vision and make one's thinking illogical. Responsibility for the acts of six-year-olds rests with parents. The State of Mississippi is responsible for this homicide in that the state allowed this grown up child to run abroad and do just what pleased him. Beside all this he has three wives and several feeble-minded children. The state has now assumed life long care of Brady. Had Mississippi assumed care of him when he was a boy, put him in a Colony for the Feeble-minded when he was a lad, the life of Pink Hardin would have been spared, and the feeble-minded pauper and criminal progeny of Brady would not have been born.

THE MAKING OF CITIZENS.

At a time when everyone in Alabama is discussing the all-important question of better pay for teachers in the elementary schools and in the University, and the better organization of all educational facilities, it is important to bear in mind the limitations of education. There are among us some individuals who cannot be trained to citizenship, because of limitations imposed upon them by the conditions of birth.

Cases coming before the state and county authorities in Tuscaloosa County recently called attention to this limitation. All are failures in citizenship. One is a case which proper education could have altered; the others are cases which no amount of education could have made available as citizens. These cases represent waste places in humanity with this significant difference,—education could have saved one and could not have saved the others.

Doc Bigham, a white man, aged 48, was hung in the Tuscaloosa county jail two weeks ago. He was a homicide many times over. He is reported to have killed a boy when he was yet in his teens. He is thought to have killed his own uncle for \$12.50. He escaped from the penitentiary twice, being confined once for illicit distilling, and again for killing an officer. This last time he had a life sentence. He had married and had two children. Upon his second escape from the penitentiary he and his wife separated and the older boy went with Doc. They both went armed and hid in the mountains and swamps of Tuscaloosa County, thus eluding the officers for about three years. About two years ago they were spotted and the boy was killed by officers in an attempt to capture the father who eluded them. Six months ago a sheriff, a deputy sheriff, and a United States revenue officer, following down a trail on the hunt of illicit distillers, the sheriff dropped dead from a shot in ambush; the deputy had his arm shattered; and Doc, who fired the shots, while re-loading and making off, had his kneecap fractured by a bullet from the revenue officer. With this handicap he made his escape.

Doc was illiterate and thoroughly anti-social, but, as might be judged from this career, was gifted with a large amount of common sense. He had rather keen intelligence. Measured by the Binet tests he made a mental age of 11.4 years. Education of the proper sort could have made a useful citizen of this man.

July 12, 1919, Bryce Hospital admitted temporarily, from Tuscaloosa County, two brothers aged 26 and 30 years respectively. They are fine physical specimens. The older boy can plow and he converses reasonably well; the 26 year-old does no work and makes very little effort at conversation. The older one has a mental age of about 6 years, and the younger of about 4 years. In other words, they are both plain imbeciles. These boys have three sisters. The two older girls are married and have children. A younger girl is at home. All three of them are feeble-minded. The father accompanied his sons to the hospital. He seemed to be a reasonably intelligent man but very nervous. The mother of his five children died of cancer of the stomach, aged 49. The father and mother were first cousins.

Boys and girls of this sort can never be made into citizens no matter how superior the schools may be to which they are sent. Education can do nothing to rid us of the problem of such mentally inferior persons. They would do more work in a Home for Mental Inferiors than they do in their father's home. They would not have the same opportunities for crime and immorality, and, most important of all, they would not marry and they would not have feeble-minded children. The Alabama Home for Mental Inferiors is the logical means which science has proposed for limiting the propagation of these poorly endowed families whose members cannot be made productive citizens by educational processes.

THE PITIABLE STORY OF A FEEBLE-MINDED GIRL.

Recently Bryce Hospital had to discharge a feeble-minded girl, simply because she was not insane and her place was needed by one who could possibly be cured by treatment. This girl could not be cured. Bryce Hospital, being a hospital and not an asylum for the custody of the feeble-minded, she had to go back to her feeble-minded mother. This case is cited because it is typical, not because it is exceptional. No week passes without several such persons being refused admission and others being discharged, unimproved, from Bryce Hospital.

This 13 year old girl was admitted from Marshall County. Her father had died of pneumonia, leaving a feeble-minded wife and six feeble-minded children. This girl had been in the Odd Fellows' Orphanage three years. They characterized her as "very dull, nervous, obstinate, bad tempered, and given to pilfering". Naturally three years of such a girl was enough for an orphanage, and the probate court helped them to send her to the Hospital. Here she was kept only forty days before she had to go to her mother.

The girl is well developed physically. She is well sexed. By the Binet-Simon tests she exhibits the mind development expected in a child of four years. She is a low grade imbecile. She does all that is expected of a three-year-old. She misses two, of six, four-year performances, being unable to copy a square and to repeat four figures. Among the five-year performances she cannot distinguish a 3-gram from a 15-gram weight, she cannot choose the prettier of two faces where one is positively ugly, cannot define simple

words like chair, and horse, even in terms of use, and cannot carry out three simple orders repeated twice before she starts.

This simple child, who can never grow to more than five-year mentality, was discharged to her feeble-minded mother. The mother's mind has not been accurately measured, but a competent psychiatrist rates her as a six-year-old. She is in fact 35.

Can you see this girl's future? To one who knows these grown-up children it is as plain as if blazoned forth in two-inch headlines. She has strong sex instincts. She has no moral inhibitions. She has no mind for moral law, nor ordinary self-control; neither has her mother. This girl will surely be a mother under present circumstances. Most likely an unmarried mother. Her progeny will be many. They will be public charges, as have been her own mother's children (one brother of the girl was at the Orphanage with her). The girl, herself, will be in the county almshouse sooner or later.

This record of increasing pauperism is not the most pitiable part of it. The girl cannot understand why people think she is not nice, when they do not treat her as others. She can get no glimmer of meaning when a woman tells her how she should carry herself, and how she should behave. She has no understanding of laws, morals, or proprieties. Pitiable, indeed, is her lot in a world which she has no capacity to understand.

We need a Home for the custody of girls and boys like this in Alabama. Pity for them should lead to its establishment, but if the milk of human kindness in our hearts does not establish the Alabama Home for Mental Inferiors, our law-makers surely will pass the Alabama Mental Deficiency Bill in order to shut up such boys and such girls in segregation so that they shall not have six, or more, criminal and pauper children apiece as did this girl's mother.

Dr. W. D. Partlow, Secretary,

Alabama Society for Mental Hygiene.

PERIODICAL LITERATURE

ARNOLD, VICTOR P.: INSANITY AND CRIMINAL RESPONSIBILITY. All causative factors of crime must be due either to defect or abnormality in the delinquent or to factors dependent upon the environment in which the delinquent has developed, or a combination of factors of the two categories. The prime objects of society in relation to criminals are the prevention of crime and the reformation of criminals. In general, these objects are problems of treatment, the first essential in prescribing which is correct diagnosis of the factors leading to delinquency. Our concern is to find, not the "punishment to fit the crime" but the treatment to make the criminal law-abiding and to prevent the commission of further crimes. Juries should not be called upon to determine the question of responsibility, but only to decide that the offense was committed by the defendant. Disposition and treatment (including punishment) should be based upon a study of the individual offender by properly qualified and impartial experts cooperating with the courts. Provision should be made for transfer after conviction from one institution to another to afford a different kind of treatment upon presentation of evidence of the needs for such action satisfactory

to the court which passed sentence. No maximum sentence for misdemeanants and felons should be set. No parole or probation should be given without suitable psychiatric examination. In juvenile delinquency, mental age and mental stability should, within reasonable limits, be regarded as of importance with the calendar age of the delinquent. *Journal of Criminal Law and Criminology*, X-2, August, 1919, pp. 184-188. W. W. C.

CHAMBERLIN, HENRY BARRETT: CRIME AS A BUSINESS IN CHICAGO. The suppression of crime has always been a world problem. It will never be eradicated, but it must be minimized and controlled. The business of crime is today being expertly conducted and it must be combatted by commercial methods in the hands of men of big business affairs. There is at present too much apathy on the part of citizens who sit idly by until they themselves are individually injured, whereupon they demand the instant assistance of the law. It is necessary to remove the criminal from society; he must be placed where he can no longer offend. There is too much mawkish sentimentalism for the offending criminal and often the unfortunate victims are entirely forgotten and neglected. Public sentiment must be crystallized. It makes no difference how adequate or perfect the laws may be,—they must be enforced. It is a hard, gruelling, unappreciated task to curb criminality, but it must be done.—*Bulletin of the Chicago Crime Commission*, Number 6, October 1, 1919. H. P.

MALZBERG, BENJAMIN: ON THE RELATION OF MENTAL DEFECT TO DELINQUENCY; A STUDY OF CASES BEFORE THE VOLUNTARY DEFENDERS COMMITTEE OF NEW YORK CITY. This is an attempt to estimate the proportion of mental defectives in an undifferentiated criminal population. An unselected sampling of 395 cases from a group of over 4000 cases disposed of in the Court of General Sessions was used. "Of individuals under arrest charged with felony, 11.9 per cent were defective. Of convicted felons, however, 16.2 per cent deviated from the normal. Of the defectives, 11.1 per cent showed evidence of intellectual inferiority, and the psychotics, including those showing emotional instability, totalled 5.1 per cent. Furthermore, the suspended sentence acts as a sieve, by means of which the mentally normal delinquent is segregated from the defective; penal institutions therefore must, of necessity, show a higher proportion of defectives than do court cases." *Journal of Criminal Law and Criminology*, X-2, August, 1919, pp. 218-223. W. W. C.

PORTEUS, S. D.: RESEARCH PROGRAMME. The department of research at the Vineland Training School expects to devote itself chiefly to the study of the physical disabilities of the feeble-minded, their mental disabilities, and their industrial capacities. "We wish to deepen our knowledge of what the mentally deficient are, what they are not, and what they may become". Among the physical problems are (a) glandular secretion, from the standpoint of clinical manifestations, and (b) cephalometry of feeble-mindedness, based upon standardized procedure, such as that of Porteus and Berry of Melbourne in their measurements of 10,000 normal subjects. The psychological problems include (a) the further development of intelligence tests, with special reference to the factors which are productive

of prudence, forethought, ability to profit by experience, and temperamental makeup; and (b) the educational deficiencies of the feeble-minded. An "educational attainments scale" is already in process of development. The third problem, "What can the defective become?" can be answered best through a study of industrial capacity, based upon observations of what persons of varying intelligence have actually accomplished. A scale for grading industrial capacity is now being used. It is also planned to develop a summary card system for recording laboratory data.—*Training School Bulletin*, XVI-3, May, 1919. pp. 34-37. J. H. W.

ROPER, R. E.: SPECIAL TREATMENT FOR SPECIAL CHILDREN. The attempt to deal with as large a number of children as possible, and to deal with them under as nearly identical conditions as is possible, often hinders development of the individual. The exceptional child is left entirely out of consideration in this scheme of things. The writer is of the opinion that a remedial gymnast can often do much to ameliorate the condition of children who are giving trouble to their teachers. Many children are being punished for insubordination or class misconduct who do not need punishment, but rest or the betterment of some physical conditions which need attention. Fatigue is not given sufficient consideration in the ordinary school, and it is not realized that sleep is a much more natural and simple means of preventing the irritating consequences of over-fatigue than punishment.—*The Child*, October, 1919. Vol. X, No. 1. H. P.

VOLLMER, AUGUST: REVISION OF THE ATCHERLEY MODUS OPERANDI SYSTEM. A system of reporting the method of working of professional criminals was devised by Major Atcherley and has been put into practice in various police departments in England and this country. The most important clue and the one easiest to obtain—the method employed by the criminal in securing his ill-gotten loot—is often neglected. The principal factors in a revised plan include (a) crime, (b) person or property attacked, (c) how attacked, (d) with what attacked or means of attack, (e) time of attack, (f) object of attack, (g) by whom attacked, (h) nationality of attackers, (i) color and number of attackers and (j) individual characteristics of attack or trademark. The detailed data explaining each of these items are listed, each point being given a number. Establishment of a national bureau and a clearing house in each state where these standardized reports of criminal methods might be sent would be of great value in detecting migratory criminals.—*Journal of Criminal Law and Criminology*, X-2, August, 1919, pp. 229-275. W. W. C.

PUBLICATIONS RECEIVED

Berry, Richard J. A., and Buchner, L. W. G. The Correlation of Size of Head and Intelligence as Estimated from the Cubic Capacity of Brain of 335 Melbourne Criminals. *Proc. Roy. Soc. Victoria*, Vol. XXV, (New Series), Pt. 2.

After reviewing previous work which had been done in correlating cranial capacity and intelligence, the writers posit their own findings. The subjects were all adult males, and the cranial capacity was found from a three way measurement by use of the Lee Formula. The conclusions reached are (1) that the inferior, that is less well educated, classes of the community have an appreciably less amount of cubic capacity of brain than have the more highly educated; (2) that amongst classes there is a distinctly measurable correlation between size of head and intelligence, but that it would be absolutely idle to endeavor to predict the intellectual ability of an individual from head measurements; (3) that amongst criminal classes there is an undoubted percentage sufficiently devoid of brains as to render their repeated punishments for acts for which they are hardly responsible as undesirable as it would appear to be inhumane.

Bowers, Paul E. The Pawns of Fate. The Cornhill Company, Boston. Pp. 210, price \$1.50.

A book which is based upon the writer's actual experience for many years in criminological work. The plot of the story centers around the life story of a criminal, and although a work of fiction, every character represents some individual with whom the writer was personally acquainted. The direct and indirect influences of heredity and environment that influence every member of society are vividly pointed out. A very readable book that has the added advantage of being scientifically sound.

California State Board of Control. Laws and Rules Relating to State Aid for Orphans, Half Orphans, Abandoned Children and Foundlings. State Printing Office, Sacramento, 1919.

A brief digest of laws from the constitution, political code, and statutes of 1877-1878, and the rulings of the State Board of Control relative to state aid for dependent children is furnished in convenient form for reference.

Chicago Department of Public Welfare. Report of Social Service Work in Women's Department House of Correction. Vol. II, No. 2. Department Serial Number Seven.

Since September, 1917, a worker has been engaged in social service rehabilitation, and statistical work in connection with the House of Correction at Birdswell, Chicago, Ill. This report details some of the plans, accomplishments, problems and difficulties which relate to the work. Marked possibilities for rehabilitation are found in the case of numerous girls and young women, usually first offenders, indicating the need for well organized protective work. A digest

of 188 case records is appended to present a glimpse of the different types of cases and treatment afforded.

Dykeman, King, Merrill, Lilburn, and Sigurdson, J. A. The Seattle Juvenile Court's Annual Message to the Community. Reports for the year 1914. January 1, 1915, 500 Ninth Avenue, Seattle, Wash.

This report considers the problem of juvenile delinquency as it appeared in the court in 1914. A plan for the different handling of divorces is offered by the Judge by which marital difficulties must be investigated before any action can be taken, thus preventing many of the otherwise broken homes. The probation officer reports that of the children themselves, there was a change in the character of the offense as contrasted with the previous year, this year (1914) showing an increase in intoxication, sex delinquency and vagrancy. The matter of mental deficiency is considered with the conclusion that cultural treatment of these persons with the resultant inculcation of refined habits simply "render the defectives a greater social risk by supplying a veneer of quality which will increase marital eligibility." The solution lies in the prevention of procreation. As regards defective delinquents, the conduct of only about 10% of the total number of children appearing in court was caused by pronounced mental and physical deficiency. Such cases demand the custodial care of an institution for the feeble minded. Coming to the cases of mentally normal delinquents, the well-known cause of broken home was found with the addition of neglected home caused by the "tragic pursuit of gaiety". In accordance with the recognized standards of excellence, the Seattle Probation Officer attempts to handle as many cases as possible outside of court. In 1914 47% of the delinquent and dependent children were cared for informally. The supervisor of the Mother's Pension reports that the maximum age for the beneficiary under the state law regarding children of mothers whose husbands are in insane asylums is 15 years and the maximum allowance \$15 for one child and from \$5 to \$10 for each additional child. In December 1913 390 women and their children were receiving aid under this act. With careful administration and investigation this act has enabled the mother to keep the child in the home environment with the mother's care.

King, George W. Relation of the State Industrial Schools to the Probation Service. Massachusetts Commission on Probation, July, 1918, pp. 14.

Life is divided into three parts: work, rest and recreation. The latter is the crucial point in juvenile existence-recreation where, how and with whom are the things necessary to know. As determining factors heredity and environment enter in. Heredity being fixed, we are left to grapple with environment and to change it if possible. In this regard four safe-guards of the normal child appear: (1) home; (2) church; (3) school; (4) influence of other social agencies. Supervision, then, is the key-note of healthful recreation. The work of the probation office, supplying as it does this supervision when lacking or the wrong character, is distinctly preventive. The state industrial school, at the other extreme, is the last resort for the recidivist. The attempt at prevention made by the probation office having failed, court warnings and the like having also failed, the state school appears as a last resort where discipline and regularity of living attempt to uproot bad habits and plant good habits. The work

begun in the probation office is thus passed over to the state school to be carried on there. It is therefore most essential that a complete knowledge of the probation officer's experience should likewise be passed over to the state school that the school may have it as a basis upon which to work. In addition, the school and the probation officer must again cooperate that the probation officer may know of the release of his charge and so supervise the fresh start. Thus the two agencies, attacking the same problem from different angles, must work in the closest union to secure the greatest results.

Menge, Edward J. *Backgrounds for Social Workers.* Richard G. Badger, The Gorham Press, Boston. Pp. 214.

An attempt to present a historical background of human efforts and progress on which social workers may build. Rather than proposing any new theories, it aims to assist in passing judgment on the many theories and methods proposed for the betterment of the human race. The author's discussion of the Church, Right and Wrong, the Family and similar questions is exceedingly apt. His objections to birth control are forceful and well founded. Regarding sterilization, however, he has confused ethical and scientific considerations, as when he states "that it has not yet been proven that insanity and feeble-mindedness are inherited, but can be laid to training in any number of cases and not to heredity. It seems from the evidence so far gathered that they are due to a micro-organism." But this and other similar errors do not actually decrease the value of the work in its original intent.

New York. Report of a Special Committee of the State Commission of Prisons, Appointed to Investigate the Matter of Mental Disease and Delinquency. Printed at Sing Sing Prison, Ossining, N. Y., 1918.

This report which concerns the relation between mental defect and delinquency, states that 31.4% of the inmates of a scattered group of reformatories, training schools, workhouses and penitentiaries are feeble-minded while 50% of the inmates require more specialized treatment because of nervous or mental abnormalities. With such a situation, diagnosis of each delinquent is not sufficient, but the diagnosis must be made the basis for the rehabilitation and re-education of these persons along the line of the capabilities and adaptabilities of each individual case. This requires a completely equipped clinic or clearing house such as is now in operation at Sing Sing prison. This clinic should include the best known methods for physical and mental examination as well as provision for the study of vocational and personal history. The individual committed for any form of delinquency should first spend 3 or 4 months in the clinic. Once studied and classified, the delinquents should be sent to an institution maintained solely for such delinquents. The existence of such an institution might enable the reformatories to have a population of truly reformable delinquents. The clinic or clearing house should be again utilized at the expiration of the period spent at the selected institution. The amount of improvement may thus be gauged as well as the amount and character of after care necessary. In addition to the above plan, a greater degree of prevention should be attempted through the use of court clinics where potential delinquents may be caught and properly treated before actual delinquency develops. The wisdom and economy of these two plans cannot be overestimated. This re-

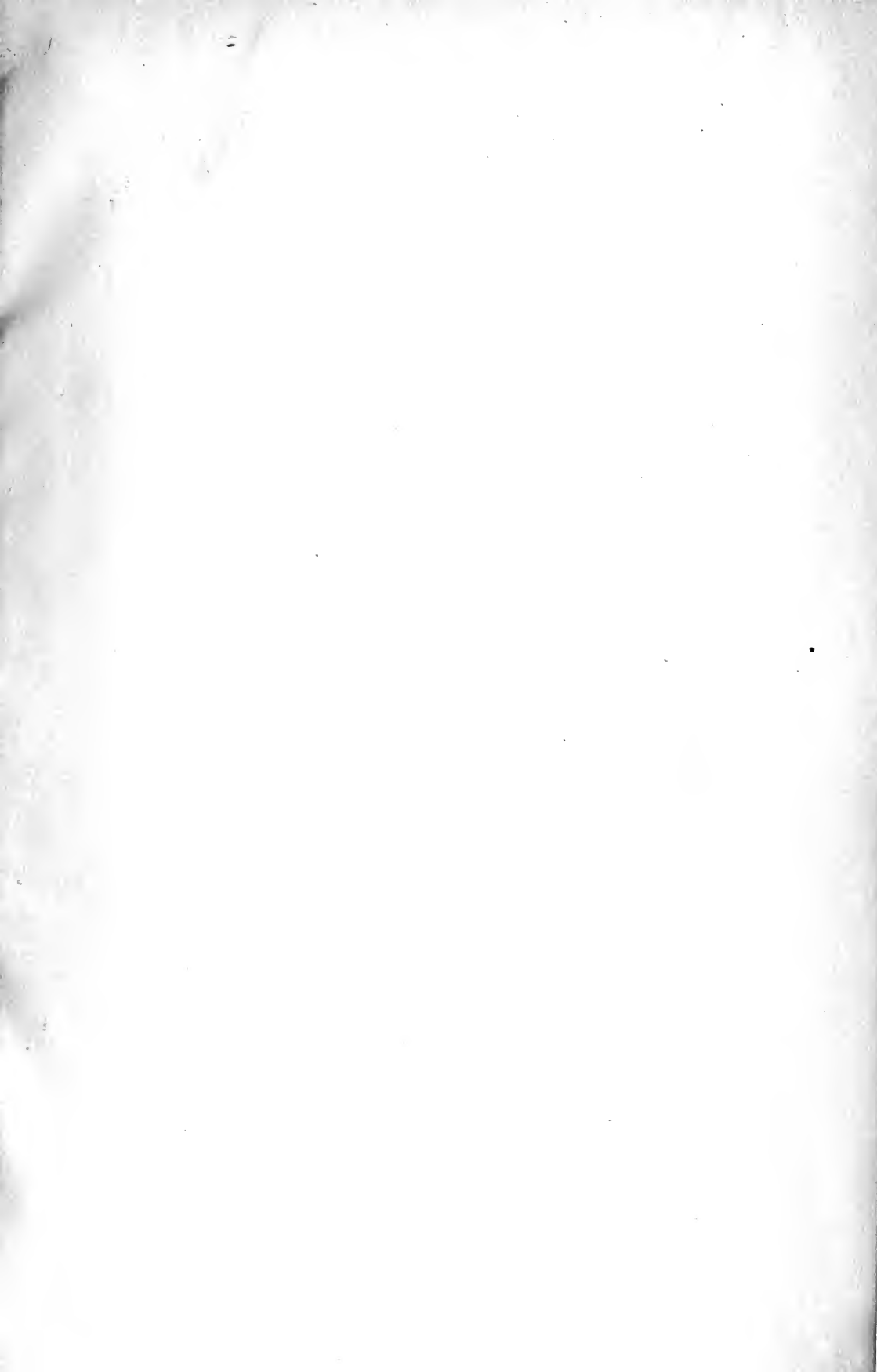
port, being made specifically for the state of N. Y., specifies the particular institution now existing to which the various groups, once classified, should go.

Porteus, S. D. *Cephalometry of Feeble-Minded.* Reprint from the *Training School Bulletin*, June, 1919, Vineland, N. J.

Although many post-mortem cases show organic brain lesions, there are many cases of what is apparently functional feeble-mindedness. There is perhaps, a physical basis for many of the so-called functional disorders. Disturbance of activity in the ductless glands, which is known to cause anomalies of growth if it occurs during the developing period of childhood, has been stated by some authorities as the underlying physical basis of many cases of mental deficiency. Of the writer's study of 36 feeble-minded individuals, 72 per cent were outside the normal limits of head for or size. 50 per cent differ markedly from the average in head capacity; 56 per cent in some single measurement deviate markedly from the normal; 20 per cent differ widely from the average in length-breadth index; 14 per cent in length-height index are outside the normal limits; 18 per cent in breadth-length index are outside the normal limits.

Smith, Fred G. *The Real Estate Man and Housing.* National Housing Association Publication No. 45. December, 1917. New York City.

The writer points out the difference between the small real estate improver and the realtor or broker. The adjustment of building and development to meet ideals and standards as well as to improve economic conditions of living is the purpose of "good housing." Better standards make ownership more attractive and improve constructive real estate business. For these reasons a good scientific and practical housing code is advocated such as that adopted for Minneapolis. The Housing Committee of the National Association of Real Estate Boards recommends housing laws to produce a high standard of real homes.







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